Phronesis and the Medical Community Follow-on Impact and Engagement Project

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Impact Assessment of *Phronesis* Resources on Ethical Decision Making for Doctors

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Abstract

The original '*Phronesis* (practical wisdom) and the Medical Community' research (2015-2018) contributed theory of the virtues that the medical community in the UK draw on to make good/wise/ethical decisions for patients and their communities. A research process that draws on humanities (virtue ethics) and arts (film production) helped to convey that theory in a highly accessible film box set and app format. The purpose of the follow-on 'Impact and Engagement' project (2018-2019) was to assess the impact of that contribution by evaluating its application in a series of pilots. Those pilots used the box set and app output of the research as a contemporary 'moral debating resource' in medical undergraduate, postgraduate and CPD educational programmes. This non-prescriptive debating resource conveyed the current 'collective practical wisdom' of the medical community interviewed and observed in order to stimulate reflection and debate on ethical decision-making. A developmental dimension to the project, a formative evaluation, used the feedback from the pilots to update the resources from an 'alpha' to a 'beta' version. That refining process helped the resources become more understandable and helpful for participants in their practice of making good/wise/ethical decisions for patients and their communities. The main research question of this project was to ask whether applying the research findings in this form contributed to cultivating or growing their *phronesis* at any stage in medical careers. The answer and central argument made in this report, based on the summative evaluation of the pilots is that the 'moral debating resource' output from the original research does support the cultivation of *phronesis* in ethical decision making at all career stages of medical practice and can be also be used to support ethical decision making in other healthcare practices. Impact areas include the following:

- Enabled medical and related healthcare professionals to cultivate phronesis (practical wisdom) in a way that improves their good/wise/ethical decision making.
- Medical students and trainees gained early *phronesis* insights related to ethical decision making from using the resources.
- Some medical schools have endorsed the research by including the resources into already very packed curricula as they can see the importance of the contribution.
- Wider wellbeing impact from changes in medical decision-making practices plus a strong interest in the approach and use of the resources from other sectors/ organisations that influence national and international wellbeing.

Both projects were funded by the Arts and Humanities Research Council (AHRC). The importance of inter-professional collaboration to ethical decision-making was raised by the participants in the original research and created a strong call for further research. This combined with the social policy drivers associated with integrated healthcare and the lack of research on inter-professional ethical decision-making has led the research team to submit a subsequent Inter-Professional *Phronesis* (IPP) research grant application to the AHRC. The aim is to study ethical decision-making in the context of integrated mental healthcare given that according to the British Medical Association poor mental health carries a UK economic and social cost amounting to £123bn a year as well the considerable wellbeing cost to families and communities.

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1.0 Introduction

The overall aim of the original three-year research project '*Phronesis* and the Medical Community' was to improve patient care and community wellbeing by improving ethical decision-making for the medical community in the UK and internationally. The research involved partnering with three medical schools and their networks to explore what it means to medical students and doctors at all stages in their careers to make ethically wise decisions. The purpose of the 'Follow on Impact and Engagement' project was to expand engagement with under and post-graduate medical education and CPD in all forms across the UK and to evaluate the impact of using the findings. The gap in knowledge that the original project responded to was a call from the academic literature, practitioner community and policy bodies to provide ethical decision-making theory that did not lead to yet another set of guidelines but instead offered a non-prescriptive *phronesis* based approach.

Ethical decision making in healthcare is under increased scrutiny due to endless media reports of healthcare scandals and its complexity has grown with demographic changes, lack of funding and higher public expectations. The sheer number of decision guidelines for doctors to follow has become unmanageable and according to a critique by Greenhalgh et al (2014) amounts to a crisis in evidence-based medicine. Calls to provide an alternative to guideline based ethical medical decision making have grown over recent years building on Dunne's (1993) philosophical argument that exposes the limits of technical reason and Tyreman's (2000) assertion of the correcting role of *phronesis* in a medical context. In responding to those critiques and calls, the original research (Conroy et al 2018) offers theory on the use of *phronesis* (practical wisdom) in medical decision-making. It complements other ethical decision making approaches and we argue here it has started to have an impact in four main areas:

1.   Enabled medical and related healthcare professionals to change their approach to ethical decision making for patients and the wider community by cultivating *phronesis.*
2.   Integrated into medical education it allows students and trainees to learn from the research output of 'collective practical wisdom' for ethical decision-making. It has supported the cultivation of *phronesis* in medical under-graduate, post-graduate and CPD programmes.
3.   Medical schools, influential professional bodies and CPD providers in the field have viewed resources on-line and/or have requested and been given face-to-face presentations/ workshops. Formal endorsement into curricula has happened with some and application is in progress with others.
4.   Wider national and international wellbeing impact from influencing changes to medical decision-making practices plus a strong interest from other sectors and governments particularly in leadership decision-making.

This *Follow-on Impact and Engagement* project report presents the argument and evidence to support using the theoretical resources from the original research findings in educational and CPD programmes at all levels to enhance ethical decision making for the medical community. The resources begin to fill a gap that has been identified by the national and international communities of medical policy makers, academics and practitioners in the theory and application of practice virtue ethics and *phronesis* based approaches.

The report has five further sections. First, the original research call and context is described in a background section; second is a methodology section to explain the approach and methods used to assess and evaluate the impact; third, the main findings and analysis are presented against each of the four main impact areas above; fourth, is a discussion section to highlight the positioning of the contribution in the existing literature and then finally a conclusion section which covers practice, policy and further research implications. The appendices include the evaluation time line, dissemination event log including those that generated the 72 contacts who showed interest in using the resources and the pilot sites, survey questionnaires for L1 and L2 and the protocol for L3. The final appendix shows a diagram and explains the wisdom wheel app. The methodology for the original research is detailed in Conroy et al (2018) and a brief summary is given in the background section that follows.

2.0 Background
In recent years calls to provide alternatives to prescriptive based ethical medical decision making have increased as the sheer volume of guidelines that clinicians have to follow has been critiqued as unmanageable (Greenhalgh et al 2014). This suggests that alternative approaches to ethical challenges would benefit from theory that does not lead to producing more guidelines. MacIntyre (2009) articulates the

call from the humanities literature for ethical decision-making knowledge cultivation in professional education. He argues that ethical debating resources as provided in philosophy and theology have become sidelined because of siloing curricula for professional disciplines. The call from MacIntyre is for a return to the provision of moral debating resources, which are not in any way prescriptive. For the practice that is the focus of the research, medicine, calls and approaches have been growing (e.g. Montgomery 2006, Toon 2014 and Kaldjian 2016) that echo MacIntyre's (1981) original assertion of the loss of virtue and his practice virtue ethics advocacy. In particular, a focus on a better understanding of the concept of *phronesis* (practical wisdom) in medical decision-making has emerged. *Phronesis* is a concept for ethical decision-making based on an application of accumulated wisdom gained through previous practice dilemmas and decisions experienced by practitioners. *Phronesis* is the 'executive virtue' (Kristjánsson 2015) as conceptually it offers a way to navigate a range of practice virtues for any given case to reach a final decision on the way forward. However, only very limited empirical data exist to support theory applied to *phronesis* based medical decision-making and theory that does exist is based on empirical research with individual practitioners (e.g. Montgomery 2006 and Toon 2014) rather than practice-based communities of physicians. The gap in theoretical terms is an understanding or social construction of the 'collective' practical wisdom from a community of physicians gained through their previous practice dilemmas and decisions. Kotzee, Paton and Conroy (2016) argue for this gap to be addressed in a way that produces theory that can be applied to the use of the *phronesis* concept in medical decision-making. Therefore the primary research question for the original study was: What does it mean to medical practitioners to make ethically wise decisions for patients and their communities? Data collection included narrative interviews (n=131) and observations with medical consultants and GPs at all stages in career progression.

Analysis draws on neo-Aristotelian concepts of practice based virtue ethics supported by an arts based film production process. That analysis found that individually doctors conveyed many different practice virtues and these were consolidated to form fifteen virtue continua that convey the participants' 'collective practical wisdom' and include the *phronesis* virtue. The virtue continua are based on Aristotle's (1985) theory where each virtue continuum has two poles showing the excess and deficiency of the virtue and the 'golden mean' which is the name of the virtue in question. For example the 'negotiation' virtue in the continua has an excess decision point where the doctor decides and a deficiency where the patient decides and the mean is when the doctor negotiates with the patient (or their next of kin) on treatment plan decisions and includes their own thoughts on what might be best for the patient. In some emergencies where the patient or next of kin are not available then the tendency will be towards the excess, doctor decides pole, whereas for an adult patient who is fully compos mentis then the tendency may be towards deficiency, patient decides pole. If in the latter case the patient is refusing treatment say for a blood transfusion as they want to adhere with their belief system then the doctor may have to bring in the virtue of 'culturally competence' into the decision making process. The virtue ethics approach recognises that each situation is unique with its own particularities and so the continua allow for manoeuvre and for a range of virtues to be considered that might influence each other differently for each case. This is different to the prescriptive, follow the guideline (deontological) approach. However, the 'collaborative' virtue in the fifteen is where the doctor may consult with peers, wider family, nurses, social workers and what the guidelines advise e.g. from National Institute of Health and Care Excellence (NICE) So in this way the *phronesis* based approach complements the deontological approach by taking the guidelines into account. The *phronesis* virtue itself is from the virtue ethics stable originally proposed by Aristotle (1985) and theorised as the way to make the final decision that leads to actions based on an application of accumulated wisdom gained through previous practice dilemmas and decisions experienced by practitioners. Aristotle argued for the cultivation of this master virtue to help a person find a way through all the other virtues at play. As McKay & McKay (2018: 1) describe it *'As a virtue in one context can be a vice in another (e.g., being frugal vs. being cheap), a man needed phronesis to guide him in doing the right thing, at the right time, for the right reason'*

Aristotle's original stable included four cardinal virtue horses (justice, courage (fortitude), prudence and temperance) and therefore our job as individuals was to ensure we matured sufficiently in our practical wisdom to use *phronesis* to pull and steer the cart using those horses towards finding a place where a flourishing life exists for all. This individualised notion of virtue ethics is the way we are living now according to MacIntyre (1981) and what has happened is that we have all been pulling carts in different directions and shouting and arguing at each other about which is the correct direction as the ideologies and moral standpoints on which they are based differ significantly. MacIntyre described this as shrill debate that is echoed and explored further by McKay & McKay (2018). Often who shouts loudest or who presents the strongest financial business case wins. His neo-Aristotelian concepts advanced the virtue ethics concepts by

not defining any virtues but advising that it is up to practice based communities (using the example of a fishing community) to work out the virtues for each practice using an inter and intra practice debating process. An overriding purpose (telos) would be part of that debate. Further that the virtues and the purpose develop along the way and are conveyed at any one time in the narratives of practice that are exchanged by community members.

The original study made a step forward in advancing the existing theory on *phronesis* in the stable of virtue ethics as part of an ethical decision-making approach. For the first time fifteen virtue continua were identified as a 'collective practical wisdom' from the narratives in one particular practice community - medicine. An arts based element to the analysis supported the production of a seven part video series (a box set) which was an enacted (by professional actors) to convey the 'collective practical wisdom' of the community. These insights suggest that medical trainees and qualified doctors can cultivate practically wise decision making without being given multiple prescriptions of how it should be done i.e. being told to pull their carts a certain direction and how. Rather than prescriptions the findings offer a theoretical moral debating resource for reflection before, during and after medical decision making. A resource that can be used by doctors at all stages of professional education from medical school right through to CPD for experienced clinicians.

In addition to the excessive number of guidelines, that clinicians are expected to follow there is the challenge of managing the complexities of differing moral standpoints that result in the shrill debate described above. That challenge is added to by the continuous flow of media reported healthcare practice scandals, subsequent enquiries and the high resource demand of litigation protection that has followed. Conroy et al's research findings (2018) offer theory which they argue support doctors in dealing with the complexities of ethical decision-making and develop understanding of the process of judgement which can then reduce the risk of escalation into blame and scandal.

Doctors must demonstrate high-level skills in managing complex clinical and ethical decisions. Medical schools, CPD providers, trainers and many others aim to support and enhance these skills but little is known about what it means to them to use or cultivate *phronesis* in this context. The findings do now fill that gap in knowledge of what it means to make practically wise decisions albeit for a relatively small section of the medical community. The dissemination and piloting of the findings in the form of co-produced educational resources based on the theory developed was the first specific objective of the follow on project. The second objective was to evaluate the outcomes and impact on medical practice of using the resources. This represents the first 'collective practical wisdom' resource to be piloted and evaluated in the world. The original research found doctors used a set of 15 ethical decision components (or virtues) to arrive at wise decisions. Given doctors are still arguably the most trusted profession in the UK (Ipsos MORI 2019 & RLP 2008) possibly the world the highly positive findings from this impact case study have significant implications for other professionals and leaders that have to make wise ethical decisions on a day-to-day basis.

The resources are designed for various audience sizes and for use as either as a series of seven sessions or as stand-alone one off sessions. The resources are suitable for use in Medical Schools, for large or small group teaching, for trainees and for continuing professional development of experienced doctors. The use of the resources was variable and therefore the evaluation did not follow one mode of use. With time pressures in education at undergrad, trainee and CPD levels most pilots used segments of the resources. The evaluation therefore sought baseline information on how and in what ways the resources were used in addition to formative feedback on their value and effectiveness in order to inform 'beta' version development.

The methodology for the evaluation is described next, followed by the findings against each of the four impact areas described above.

3.0 **Methodology**

This section first defines the primary questions of the study; second, the methodology used along with the rationale and then the research design starting with the engagement activities. The data collection and analysis follows those two.

The two primary questions which summarise the intent of this evaluation research are:

What does it mean for education providers and their participants in the context of changes to their ethical decision making practices to be using the resources that contain the original PMC findings?

Which elements of the resources influence changes to practice?

The methodology builds on the theory of change (Weiss 1995) for the development, use and impact of these resources; wise decision is more likely to flourish if it has a means of being spoken about and debated by watching and listening to stories related to ethical practice. This aligns with the ontology of the original PMC research; narrative as the transmission of virtues for ethical decision-making practice (MacIntyre 1981). Furthermore this project added what is argued as a missing element in professional education which if included is likely to improve ethical practice - that of a moral debating resource (MacIntyre 2009). The pedagogy concept in which the moral debating educational resources were applied is narrative pedagogy (Diekelmann 2001). The originator of the Stilwell virtual community, of which the resources are a part, designed them for use in this form of pedagogy (Walsh and Crumbie 2011) In this case narratives from our research participants conveyed in the seven part film series offer anonymised enactment of the fifteen virtue continuums in a healthcare drama series. The series forms a contemporary moral debating resource which conveys the 'colllective practical wisdom' of the participants. Debate stimulated by watching the dramatised narratives which convey the 15 virtue continua supports the cultivation of their practical wisdom. The resources may be used before, during and after decisions are taken that can cultivate the *phronesis* virtue for the person taking part in the moral debate. In outline Ironside (2006: 1) summarises this approach:

'Narrative Pedagogy helps students challenge their assumptions and think through and interpret situations they encounter from multiple perspectives… focusing… attention on thinking and interpreting as communal experiences, interpretive pedagogies such as Narrative Pedagogy engage teachers and students in pooling their wisdom, challenging their preconceptions, envisioning new possibilities for providing care'

The design of the evaluation part of the study employs Creswell's (2009) mixed methods to reflect the philosophical worldviews of the two communities involved. This follows Creswell's (2014) argument for matching research approaches to the scholarly paradigm preferences of the communities involved. It also follows the advice from the medical consultant and GP research team members for the best way to engage their community in the findings and their use. First, for the PMC research team we have used qualitative thematic analysis. Second, for the ontological preference of the educational and practitioner medical community of resource users we have used a quantitative method.

The mixed methods design includes qualitative and quantitative data collected in parallel, analysed separately, and then merged. Both types of data have been used to test the theory developed from the PMC findings and its use in educational programmes. The aim was to influence medical decision-making approaches for the sites and practices engaged in using the resources. The surveys explored elements of the resources that are exposed to participants to determine which has the greatest influence on their practice changes. Next we outline the overall engagement activities and then the evaluation methods used with the pilot sites.

3.1 Engagement activities
We had already started engagement with medical education providers in the original project and the activities outlined here were designed to spread engagement across the UK. The aim was to help develop their work in the field of medical ethics education by initially introducing the research findings and resources. Further to involve participants in the co-design and development of the resources. The specific engagement activities summarised below are based on the original objectives in the proposal submitted to the funding body and were all completed:

1) Established contacts (staff responsible for medical ethics education) with medical schools and CPD providers across the UK.
2) Invited medical school and CPD provider contacts to an initial face-to-face workshop.
3) Co-produced the way forward for medical schools and CPD providers as part of the workshop.
4) Website design and set up for the 'alpha' resource provision including free use initially followed by licence fee after users had piloted the resources and provided feedback for the evaluation.
5) Second workshop to produce a one-hour introduction to the resource usage for facilitators with participants at career stages from medical school onwards.

6) Produced the evaluation criteria and process for the project
7) Carried out formative and summative evaluation on the data collected from the above events and the pilot sites (from medical school tutors and students, CPD providers and experienced medical practitioners)
8) Updated the Stilwell resource to the 'beta' version and accompanying teaching material as an outcome from the formative element of the evaluation.
9) Final workshop event inviting key actors from UK medical schools, CPD providers, public/patients representatives, policy makers, academics and practitioners (medical consultants and GPs)

The evaluation timeline, full events list and links to the materials presented is included in Appendix 1.

3.2 Evaluation

The resources were designed for use in Medical Schools programmes, for large or small groups, undergraduates, trainees, postgraduates and continuing professional development (CPD) with experienced doctors. With time pressures in education at undergraduate, trainee and CPD levels most pilots used segments of the resources rather than the full package. The evaluation therefore sought information on how and in what ways the resources were used in addition to formative feedback on their value and effectiveness in order to inform the design of the 'beta' version of the educational resources.

The two evaluation approaches used, formative and summative, are described below.

Formative
A formative evaluation-led approach drawing on Pawson & Tilley (1997) was applied. This approach used the following methods:

Co-producing and defining outcomes and impacts up front at the first workshop and then initial tailoring of the resources to create an 'alpha' version for use by the medical schools and CPD providers to achieve the outcomes and impacts they had defined.

As data from use of the 'alpha' was collected along the way it was used to modify the content and structure of the resources. Feedback for each episode used to convey the 15 virtue continua and the accompanying resources was collected at the workshops and events throughout the project. All the feedback was consolidated for each episode of the film series and for the accompanying resources. That consolidated feedback was then used by the film production team and the other resource providers to modify the resources for the 'beta' version.

The modified resources were then reviewed at Operational Group (monthly) and Steering Group (quarterly) meetings to ensure they met the issues reported in the feedback. Updates were made by the film production team and a 'beta' version of the educational resources with seven updated episodes was produced as the final version for the impact and engagement project. The resources in this final general Release to the Web (RTW) version are more accurately called a '*perpetual beta'* version because they can be added to and modified further if required. Given the licence fee income and the formation of a virtual practice community of users the resources can be updated to reflect contextual and other changes over time.

Summative
In order to make the case for wider dissemination and gain buy in from the medical community for using the resources a summative evaluation was applied drawing primarily on the Kirkpatrick (1994) evaluation framework. The framework has four levels:

Level 1: Reaction – the degree to which participants find the training favourable, engaging and relevant to their jobs;
Level 2: Learning - the degree to which participants acquire the intended knowledge, skills, attitude, confidence and commitment based on their participation in the training;
Level 3: Behaviour/outcomes - the degree to which participants apply what they learned during training when they are back on the job; and
Level 4: Results - the degree to which targeted impacts occur as a result of the outcomes and the follow up support.

In the twelve months of the project we completed evaluation with the learning providers of levels one to three which is what had been agreed. Level four was left to the providers themselves to evaluate and help them take full ownership of the different approaches to medical education and use feedback from these to continuously improve their practice.

Data was collected from three key groups:

- Medical Students at UK Medical Schools. Original partner Medical Schools (Birmingham, Nottingham, Warwick) and other medical schools recruited via conferences, workshops and mailshot
- Trainees: medical and surgical via partner organisations and GP trainees via HEE Programme Directors
- Senior doctors and medical consultants in hospital practice and general practice via a network of contacts

Evaluation Process and Timeline
The initial evaluation period was from January to June 2019 during which time the resources were made freely available to any pilot sites on completion of a on line licence agreement from the project's dedicated website. For Kirkpatrick (1994) Levels 1 and 2 it consisted of a simple formative evaluation (see appendices 3 and 4).

Participants were asked a series of questions starting with Likert scaled questions to enable speed of completion and ease of analysis, with additional open-ended questions to enable participants to provide more qualitative feedback. A thematic analysis of the qualitative feedback was conducted. The initial questions focussed on feedback on the session or course itself: whether they found the course and video materials engaging, whether they enabled debate regarding wise decision making, whether the introductory presentation and accompanying participant notes were helpful. This was followed by a set of two questions on learning: whether participants felt they now knew more about how wise decision-making can be enabled and whether or not they have been aware that there has been a change in the way they are speaking about and reflecting on their decision making. Two final open-ended questions sought views on how the course or materials might be improved and any other comments. For educators some questions were amended to account for issues such as the use of tutor notes, learning outcomes, impact on participants and whether the educator would like to use the materials again. Both versions of the evaluation sheets are in Appendix 3. The specific aims and data sources for the levels of evaluation were:

Level 1   Reaction
To explore the reaction to the resources and gather some baseline data on the uptake of the resources by different Medical Schools and CPD providers. Attendance on the course statistics. On the day evaluation; what participants and what trainers, tutors and lecturers felt worked well and not so well.

Level 2 Learning
To explore the effectiveness of the resources in enabling a debate (on the course and internally with colleagues) about wise decision-making. Intended for those completing the course, or as a minimum seeing more than one episode, but was ultimately included for all participants. Assessed via a question asking if there has been a change in the way they are speaking about and reflecting on their decision-making.

Level 3 Behaviour
To explore impact in terms of the delivery of care to patients; the impact that debating practical wisdom by using the resources had on the behavioural approach to decision making by doctors in practice. This sought to discover if learning translated into different behaviours. What are participants doing differently? Those participants and educators who expressed a willingness to be contacted after they had completed level 1 and 2 feedback were contacted via email to carry out a short semi–structured telephone interview focussed on identifying any impact on their practice. The Topic Guide for these interviews is in Appendix 4.

Level 4 Results
It was stated in the original proposal that it would not feasible to collect data on level 4 given the time available. There are a large number of contributing variables which would make this hard to evidence. For medical students it is too early to predict and for doctors in practice it would require ethical approval to interview patients and/ or colleagues, run focus groups, review complaints, etc. For the home University systems and

Research Excellence Framework (REF) level 3 impact, changes in medical practice, is sufficient to indicate the impact of the research.

3.3 Pilot site recruitment and data collection

The piloting of the resources began in December 2018. The resources were set up to be accessed via a specific password protected website with pilot sites given access once they had completed a licence via Intellectual Property Services which are part of the University of Birmingham Enterprise Ltd. The pilot period was initially scheduled to run until the end of June 2019 but that was extended to June 2020 as there has been a series of sites wanting to use the materials for the whole 12 months of the project.

Recruitment of pilot sites commenced in December 2018: the target audience being medical schools in England and Wales, those involved in specialist education and training in particular primary care and those involved in continuing professional development. An Information Sheet (Appendix 2) to explain the pilot evaluation process was sent with the evaluation sheets. A mail shot was sent to all ethics leads across all medical schools in England and Wales, contacts made via conferences and other events with tutors, medical directors of education and others who had expressed an interest. In addition, policy groups and Royal Colleges e.g. General Medical Council, Health Education England, Royal College of GPs and Royal Society of Medicine requested visits from members of the research team to run workshops and introduction sessions. The informal networks (social capital) of the project steering group members and previous workshop attendees also produced enquiries.

By May 2019 following enquiries after the above contacts were made and through the events listed in Appendix one, 72 people from the medical education field showed interest in using the resources. By June 2019 eleven out of the 72 had signed licence agreements and that number is still growing. A simpler licence sign up process is currently being implemented as the original arrangement did not suit IT platforms at some sites and we know from feedback that has meant some of the 72 could not sign up. Additionally, feedback at project workshops and from initial pilots indicated two other issues. Firstly, the curricula and teaching timetable at some medical schools is very full so the way the resources are introduced needs planning at least 12 months ahead of time. That has now been done with Birmingham, Warwick, Nottingham and is planned with Lancaster and others. Second, the fact that the concepts and materials are based on practice virtue ethics philosophy a humanities grounding and primer in the concepts was requested. This grounding was designed as a one-hour introductory interactive workshop at the second workshop for the project which can be modified for UG, PG or CPD primer materials. A fairly significant script modification to film episode 1 was also introduced to provide some of the background to virtue ethics. In addition talking head videos have been produced and posted on the website for those who would like to meet some of the research team members and obtain introductions to the research project and findings. Eleven pilots were completed before the end of June 2019 and these formed the main data source for the analysis below. These included workshops, panel presentations and lectures delivered directly by project team members. Each of the original three partnering medical schools ran pilots and their data is also included. The ongoing project feedback and the formative evaluation strategy was used to keep the approach and resources in tune with the needs of the users during this period by updating the resources and the way they were presented.

Pilot sites were also recruited via the project partners and their networks, project workshops and by the running of sessions and exhibitions at the 2018 Annual Conferences of the Royal College of General Practitioners and the 2018 Faculty of Medical Leadership and Management Conference. In addition, the projects findings have been presented at conferences and the project's own workshops and the feedback has been used to inform this evaluation. The Northamptonshire GP trainees group watched all the videos in two sessions and used the accompanying notes to prompt discussion. The pilots are listed below and the ones up to June 2019 provided evaluation feedback that was used in this analysis.

- British Academy of Management Conference Workshop, 05.09.18
- International Studying Leadership Conference Workshop, 17.12.18
- GP Trainees in Northants, January 2019 – July 2019
- Lancashire Teaching Hospitals, Preston Royal Hospital pilot, 29.01.19
- Intercalated students, Birmingham Medical School, 31.01.19 and 05.02.20
- Decision module, transplantation lecture, Birmingham Medical School 04.02.19 and 03.02.20
- Warwick Medical School pilot 22.02.19
- Nottingham Medical School, lecturers and tutors pilot 13.03.19

- Clinical Fellows at University Hospitals Coventry and Warwickshire 26.03.19
- Cumbria Occupational Therapists Year 2 Masters Student lecture 02.04.19
- Royal Society of Medicine (RSM) CPD event 12.06.19
- Royal College of General Practitioners (RCGP) presentation 12.09.19 and 04.02.20

A one-hour introductory session, designed for any level of understanding and knowledge of the concepts is available and has been developed and adapted for use at most of these events. Formal endorsement has been given through incorporation into curricula for some and application is in progress with others. Either way it has led to an interest in awareness raising of the resources with doctors and other healthcare professions connected to these institutions.

3.4 Data analysis

Quantitative
A total of 65 participant evaluations and 11 tutor evaluations were completed using the evaluation forms in Appendices 3 and 4. For each of the seven questions, scores were grouped into strongly agree/ agree and neutral/disagree/strongly disagree to give an immediate sense of the how useful the resources were, whether it would change the way they practiced ethical decision making and whether they would recommend the resources to others.

Qualitative
The data analysis initially used the theoretical frame of three levels from Kirkpatrick (1994) to categorise the data and then within those three levels subthemes were defined and then consolidated under four main themes. All this was done using the NVivo thematic analysis features.

4.0 Findings and Analysis

The quantitative findings are summarised first and then the qualitative findings. The two support each other in terms of the qualitative giving some detailed accounts which explain what is behind responses for certain questions. These explanations are also evidenced by the feedback received from delegates at the final workshop and other conference workshops.

The categorisation of the qualitative data used the Kirkpatrick (1994) evaluation levels theoretical framework and then the quantitative and qualitative findings were merged and consolidated under four main themes in the second part of the analysis. In this way as Creswell (2014) suggests the qualitative data can be used to explain the quantitative results.
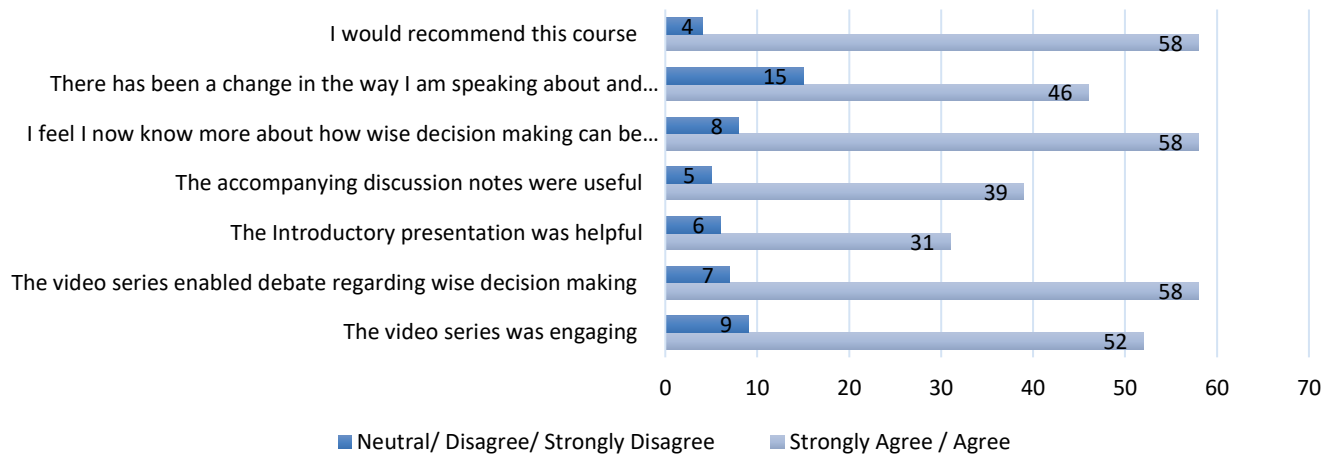
Quantitative findings
A total of 65 participant evaluations and 11 tutor evaluations were completed using the evaluation forms in appendices 3 & 4 respectively.

Participant Feedback
The table below summarise the scores from the participants against the seven questions:

Participant Feedback

Question	Neutral/ Disagree/ Strongly Disagree	Strongly Agree / Agree
I would recommend this course	4	58
There has been a change in the way I am speaking about and…	15	46
I feel I now know more about how wise decision making can be…	8	58
The accompanying discussion notes were useful	5	39
The Introductory presentation was helpful	6	31
The video series enabled debate regarding wise decision making	7	58
The video series was engaging	9	52

■ Neutral/ Disagree/ Strongly Disagree   ▨ Strongly Agree / Agree

Overall, for 65 participants, the scores for all seven questions asked were positive. Not all questions were answered by all participants and in the larger lecture format the return rate of evaluations was less than at the other pilots. However, across all the pilots, the majority of participants were positive about the resources and recommended that the resources support medical ethical decision making that leads to better outcomes for patients and their communities.

The key impact questions, 5 and 6, which relate to their knowledge and the way they speak about and reflect on decision making showed 88% and 75% positive scores respectively and this is backed up by the qualitative data.

In terms of answering the question: Which elements of the resources influence changes to practice? Then it seems that the video series came out on top with a full response and 89% positive score. The other elements, the introduction and the accompanying notes were positive but the fact that far fewer people answered those questions indicates they were not as influential on practice changes. The qualitative data supports this finding.

Tutor Feedback
The feedback from tutors and lecturers (n=11) was generally positive, however a number of questions were scored neutrally. For example, three tutors and lecturers were neutral regarding the tutor notes and four were neutral as to whether they might use the material again. Light is shed on these scores in their qualitative comments, where it is seen they generally perceive the material good for postgraduate students but for undergraduate students in its current format it needs more introduction. This finding was supported both by the tutor and student qualitative responses. The formative element of the project meant a proactive use of this feedback to devise a new one hour introductory session which is adaptable for different levels of understanding of the philosophical concepts. In addition the first video episode was completely re-shot to provide a framing for the concept of *phronesis* and virtue ethics.

The full range of quantitative feedback is shown in Appendix 6. For the quantitative findings, only those participants and tutors completing the evaluation form were included whereas for the qualitative feedback a wider sample was possible including those who viewed the resources and gave comment at earlier project workshops. We now move on to summarising the qualitative findings.

Qualitative findings
Qualitative feedback was received from 87 participants (including 11 tutors). The feedback received at earlier project workshops was also utilised (31 at March 2018 and November 2018 workshops) giving 118 responses. Evaluative questions were asked of the participants and tutors. 95 responses were received.

4.1 Levels 1 and 2
Initially data relevant to themes Kirkpatrick levels 1 and 2 were analysed and broken down into subthemes. Data were coded in NVivo 12 plus and a thematic analysis was performed. The following subthemes were generated:

- Moral debate and discussion
- Reflexivity
- Cultivation of *phronesis* from an Educator's perspective
- Introducing the topic of *phronesis*
  - Tutors' perspective
- Useful resource
  - Tutors' view
- Prescriptive approach or not
- Delivery format
  - Tutors' view
- Career stage applicability
  - Tutors' view
- Theory and praxis

The above themes were then drawn together under the two main impact themes below:

1. Enabled medical and related healthcare professionals to change their approach to ethical decision making for patients and the wider community by cultivating *phronesis.*
2. Resources being integrated into medical education allows students and trainees to learn from the research output of 'collective practical wisdom' for ethical decision-making.

The findings are presented below against the two themes. They were derived from NVivo analysis of the free text comments on the survey forms and feedback form the other sessions and workshops held during the impact and engagement project period.

1. Enabled medical and healthcare professionals to change their approach to ethical decision making by cultivating *phronesis*

The sub themes that emerged and were consolidated under this main theme were moral debate and discussion and reflexivity. These two are expanded on below with examples from the data.

Moral Debate and Discussion

A large number of participants reported that the videos help in discussing (ethically) problematic cases. The discussions would be aided since the teaching toolkit, i.e. the video series, are not only useful but also very interesting. The videos generate *"new thought processes"* (I-6). The more experienced participants and those who were responsible for tutoring /teaching considered that *"v[ery] good discussion point[s]" (DB-4)* were generated which were engaging. The *"clips trigger conversations around difficult situations" (DB-14)* and these *"could be used as a trigger for debate and discussion" (DB-14).* There were those who commented that the resources would also generate a debate on contrary issues*: "The videos could be good to introduce the contrary view – to get debate"* (PMC –March W'shop). Thus, a vast majority were of the view that these are useful in the real world more so because it helps "*Discuss the ethical issues and legal limitations; Reality is collision between virtues and legal issues" (PMC-March W'shop).*

Some of the students also agreed that the videos were engaging, insightful and generated *" v[ery] good discussion point"(I-4)* which *"were the most engaging and insightful" (I-2).* In fact some participants were of the view that more time for the videos *"Longer [time] on videos ….."* (I-5), would have been beneficial. When two of these videos were shown during a lecture, participants who were undergraduate medical students commented that time constraints mean that the lecture was rushed (RMB-T01). So, the students were of the view that as there was *"no time in the lecture" (B2-5) "more time should be allocated to ensure all material is covered in sufficient depth"(B2-6).*

Reflexivity

Many participants found the videos useful in generating new thought processes as expressed by students *"brings up new thought processes"* (I-6) and more experienced doctors as well "*provoked many thoughts*" (DB-8).

A very important point raised by a participant at one of the workshop was: *"Phronesis – helps to understand your own thinking but does it uncover your own blind spots – extend your moral gaze"* (PMC March W'shop). The usefulness of these video as a tool for reflection was reiterated: *"Certainly, it can be used as a tool to reflect, so what could have been done better, this situation was handled appropriately or there are certain things that you could have done differently"* (Int.3-01).

Some students evaluated the session using these videos as one of their "*favourite sessions of the year*" (OTMC03) perhaps because it covered issues that were relevant to their practice: *"beneficial debates covering topics that are relevant to placement and practice"* (OTMC03). Others found it useful for if they*: "work on being virtuous in my practice I will flourish, feel I am doing good in the world …." (*PMC-March W'shop).

The more experienced participants were able to detect virtues that the simulated doctors did not possess, and how it helped them in their thinking about their work practices. Viewing these clips made an occasional participant realize the importance of patient advocacy. The virtues (or lack of) were:
"*Very poor communication skills, no empathy, lack of values, It helped me realise some of my practice mistakes that I make subconsciously*" (DB-2).
"*This raised question about advocacy for patients which was interesting….this is a commonly encountered issue*" (DB-13).

Some were of the opinion that although the videos covered important issues a wider range of examples and practitioners would have added to this resource: "*more examples with different levels of staff*"(I-4) . It was also recommended to add more and diverse scenarios: "*Course materials could be improved by adding more scenario* (SN-02) or then "*the videos could be made longer to cover more diverse scenarios"* (CT-02). Another suggestion was to have a *"series with patients perspectives as the focus, in different settings…"* (PMC-W'shop).

The impact associated with this theme is further emphasised by the level 3 evaluation findings and analysis in section 4.2 below.

2. Resources integrated into medical education allows students and trainees to learn from the research output of 'collective practical wisdom' for ethical decision-making.
The sub themes that emerged and were consolidated under this main theme were the educator's overall perspective, introducing the topic of *phronesis*, useful resource, non-prescriptive approach, delivery format *and* career stage applicability. These are expanded on below with examples from the data.

Educator's overall perspective
Tutor participants were of the view that the issues portrayed in these videos are what is usually encountered in primary and secondary care settings and so realistic:

"*Clips present realistic scenarios that are encountered in practice and elicit several interesting discussion points that can be used in a teaching session"* (DB -6). The GP practice clip was especially useful according to DB-11 as "*an example of an important topic - that sometimes doctors don't want to say things in front of family members and different religions' cultural needs have to be considered when assessing patients*"

Simulations, such as videos, that depict reality are thought a useful means of making trainees aware because one learns: "*over the years, general medical school and general practice training doesn't prepare you for the real world. But I've had to learn it, what's going to help my patients the most, you know" (Int1-02).* Another said: *"What is depicted in those videos is scenarios that doctors face on a regular basis, and so for somebody who's not used to these scenarios, having those videos will help when they keep that in mind when such a situation arises…"* (Int.3-01).

There were those who thought that using these videos along with the tutor notes to explore students' views regarding the issues portrayed was important and having a "*structured debate*" (RK02) would be good but that: *"Spontaneous discussions and eliciting student views should occur prior to questioning"* (RK01).

Some considered that the portrayal of a trainee speaking to the consultant in a 'challenging 'manner though highly unlikely would "*enhance the learning process*" (DB-4). Another thought that the scenes/incidents depicted in the videos were good for students/doctors as reflective tools and their own experiences may come out in discussions and so be of help: "*Some medical students may have been in similar situations but have not discussed about it /raised the issue e.g. fear of offending their seniors*" (DB15). While others thought that it is important :" *to be careful with issue of speaking up*"; and that tact is a virtue said one: "*Medical student too disrespectful in GP surgery – tact is a virtue*" (PMC-March Workshop).

It is important to include more complex cases, said one participant: "*Also needs to touch on more complex decision making situations that promote real discussions/debate*" (DB-15).

Introducing the topic of phronesis
Undergraduate medical students were of the view that the concept of *phronesis* needs to be made clear – to provide context with practical examples as to how it is relevant to medical decision making and that "*itself wasn't explained as well as it could have been*" (B2-6) which meant that they did not /do not know what *phronesis* meant. It was stated that a lecture would be good to start with the definition and concept of *phronesis: "a lecture on what virtue ethics are, and what phronesis is" (B 2-5.)*, for despite the lecture, they were unsure: "*I still didn't know what it was…*" (B2-2). Thus an introduction *to* virtue ethics as "*a lecture on what virtues ethics are, and what phronesis is" (RM-BT-01)* would have been better. In response to this the tutor (RM-BT-01) has discussed plans to introduce the topic in an hour long lecture for the next academic year (2019-2020).

Other, experienced doctors (RSM-1) and tutors (Int.1-03) were also of the view that some background reading/knowledge is necessary, as it would help clarify the virtues and their meanings:

"*The prompts themselves are fine, but I think for tutors that had less background knowledge, they may take it down the wrong track. I think it's more that background knowledge, what you should be gaining from the discussion and that sort of thing*" (Int.1-03).

There were tutors who, like the students, thought that to understand virtue ethics it needs background context: "*this has to be placed in the context of "ethical" models and students taught that there is no "right" or "wrong"* (RK04) A better time to show these videos would be after some context has been provided to the students and so according to RK05 "*after a lecture on virtue ethics or some basic theory on ethics*", where some knowledge has already been exchanged and "*clarification of definition of virtues prior to discussion*" provided *(RSM-05).*

One of the trainers stated how they included virtue knowledge to help trainees incorporate them into their interactions with patients: "*I teach my trainees about the four ancient virtues that the Greeks talked about anyway – about temperance and honesty and courage and justice. So, that is always one of the tutorials we have, about what makes a good doctor and how doctors need to use philosophical knowledge to help themselves and their patients.*" (Int1-02). The PMC resources are 15 virtues that effectively include those four plus *phronesis* (Aristotle called this prudence originally and it is now translated as practical wisdom) and use the language of the medical community research participants.

As mentioned above to address this feedback directly as part of the formative evaluation, episode one of the video series was modified to include an introduction to the concepts of *phronesis* and virtue ethics plus a one-hour introduction session was designed at the second workshop specifically for tutors that could be modified for UG, PG and CPD programme use.

Useful resource for cultivating phronesis
Despite the expressed need for an introduction or primer on virtue ethics and *phronesis* most students and tutors were of the view that these resources provide a useful tool for developing *phronesis* (and virtues). Not through a prescription of what should be done but through moral debate relating to the various decisions made in the clinical context that take into account the particularities of each case.

The videos are a good way of delivering 'reality' which mere reading may not, according to a participant:

"*Beauty of videos are that it shows professionals are human*" (PMC-March W'shop). Videos are an effective way of showing both professional and clinical problems: "*Portrayed professional as well as clinical issues*"; "*concrete facts will never be the full picture*" (PMC-March W'shop).

Most attendees at a workshop found these resources: "*superb as a teaching tool; realistic, familiar examples*" (PMC-March W'shop); "*very good tool*"(DB- 2) to "*excellent idea and project… looking forward to seeing more*" (DB-8).

Clinical fellows also found it useful as they developed "*more understanding of virtues and more able to learn*" (SN-14). Some commented if it was possible to have "*access to the resources, like on- line access, I would like to go through it all, the session, the discussion was short because we were conscious of time*" (CT04). Said another trainee: "*It will be helpful if the course could be made easily accessible to trainees*" (SN-02).

Tutors reiterated the usefulness of the resource as well. RM-BT-01 who wrote that for the next academic year for undergraduate medical students they will be allocating an hour for viewing the videos and ensuing discussion. Another stated that:
"*Certainly verbal feedback when I asked them after the session yesterday, 'Was it something that they would want to us repeat next year?', for example, they all said yes unanimously. I think we probably will continue. We may do it on a biannual basis rather than annually, but we'll have a look at the programme so we can start it*" (Int.1-03). Another interviewee praised the making of these resources and said:
"*You do great work, and you've got a great team there, and I'm very proud of what you're doing*" (Int1-03)

The resource was also recommended as being useful for other healthcare disciplines in terms of support for better healthcare decisions for patients: "*It is a very useful resource and should have a wider reach to most health workers. It will help in patients getting a better healthcare*" (FoF w'shop -07). Others found it very useful and said: "*Very good for community based decision making. Learnt about negotiating skills*" (SN-06). Other participants at a workshop also found some aspects of the videos as very good tools for conveying virtues, such as respecting patient's values and beliefs: "*Contraception was very good for discussion on values and beliefs*" (PMC-March W'shop) and could help in teasing out ethical issues doctors encounter. Similarly, scenes relating to specific issues were considered good for generating discussion. For example, one participant *"liked the medical certificate scenario as a teaching tool"* and raised the following question: "*What is the motivation for not charging for the sick note – could be a useful discussion – penny wise*" (PMC-March W'shop).

Some participants thought that some parts of the video clips could be used to help doctors develop resilience. Said one participants: "*use film to ask 'what would be the impact on you and what could you do about it?' use it to help with resilience*" (PMC-March W'shop). The tutors were able to comment on the importance of the virtues shown and how they help:

"*Communication was central in both videos. This includes communication with colleagues and with patients. Verbal, listening and non-verbal communication good use of emotional intelligence in episode 6.*(DB-7).

It may be that the videos help in inculcating what GMC wants in 'tomorrows' doctors': "*Easy route into GMC guidance*" (PMC –March W'shop). However, there ought to be a caveat, according to one participant, to: "*Make it clear when publicised that using a virtue framework isn't the only way to teach ethics*" (PMC-March W'shop). Another doctor advised using the videos to prepare students for Objective Structured Clinical Examinations (OSCEs): "*the students have to show some compassion and think on their feet and things, so having seen the videos, it might prepare the students better for those OSCEs*" (Int3-01)

There were those who were critical of the settings and considered that the films were "*short*" *and so the things that were raised in them did not feel real*" (DB9). Some others were unsure whether their present teaching schedule would allow for the incorporating these videos as said this participant "*not sure of the place of these videos in our teaching*" (RK06).

Some were critical of the videos suggesting that background context to the production of these videos would have been beneficial: one participant found these videos *"interesting but not offering anything new or not available elsewhere"* though was of the view that the app. (wisdom wheel) "*seems to have much more*

potential if it were more interactive (choose your own adventure)". One participant was critical of the "gender roles" portrayed in the videos (PMC –Nov W'shop).

Background information regarding the situations shown in the video clips would be helpful, perhaps something that facilitators could help build upon during discussion as said this participant*: " A little bit more background on the situation shown in video, could have created more discussion"* (FoF 05).

All the above formative feedback points have been taken into account in the 'beta' version by building on the strengths identified to address the areas for development. This was undertaken by meeting and working with medical school UG/PG and CPD programme directors and tutors to co-produce updates. Included now in the beta version is biography background information for patients and the main characters, gender and cultural diversity taken into account plus adding a new episode seven that addresses the ethical differences and tensions between senior managers and clinicians.

Non-prescriptive approach appreciated
Although there was a suggestion that " *it needs to be made clear that purpose of videos was for shared involvement and decision making"* (DB-15), there were those who said that less 'prescriptive' is better:
"Less didactic spoken content. Less prescriptive tutorial guidance. Both will make the resource flexible and attractive; flag up potential topics from videos rather than provide learning outcomes" (PMC final W'shop).

An occasional participant was of the view that it would be useful if the process of the non-prescriptive debate stages were better explained: *"a more clear explanation as to what virtues are considered the most important of the 15"* (I-3*)*. A *"flow chart for answering the videos and what is [the] best way to make a decision*" would be useful too. (I-6) or as one suggested in response to the 'wisdom wheel' that was introduced as a tool to consider whether and which virtue and at what point in the process it was considered useful to come to a decision. That is, would be useful to know at *"what level around the circle – impact how important the virtue is?"* (I-3)

In response to these comments, as part of the formative evaluation, an approach to using the non-prescriptive process was developed and has been included in the one hour introduction and will be published as a separate 'tool' paper in due course. Essentially a three stage process recommends breaking down the 15 virtues into: 1) those directly related to the patient; 2) bigger picture/ community/ society considerations; and 3) self and team considerations. This is so that not all 15 virtues necessary to consider simultaneously but in stages. The 'Wisdom Wheel' App. is configured into those three stages with three concentric circles from outer to inner in that order (See appendix 7).

Delivery format
The format of delivery was considered important to aid discussions generated from the videos. Thus a lecture, as stated above, followed by small group discussions around a particular virtue enacted in the video in order to get a clearer understanding of it was advocated by some participants –especially undergraduate medical students:
  "It would be more helpful to watch the video series in small groups and discuss them…. maybe as part the CBM day (B2-5)- or a "*workshop type format" (DB14)*.

Most undergraduate medical students felt that running videos as part of a lecture defeats the purpose – since there is not enough time and so it is rushed. This was reported as: *"felt that the session was rushed" (*RM-BT-01*)*. Therefore, it is important, as said earlier, to *"have more time allocated to sessions*" (RSM 05).

According to some participants, the discussion can be done as a debate in small groups – that would aid in understanding how different virtues may be used in different contexts to help make good/ethically wise decisions. Another process could be to note their thoughts in a "*log book*" (B2-5*)* but being mindful that *"anonymity was important in this"* (B2-5).

Small group tutorials were by far the most suggested format by tutor participants for using these video teaching tool:

*"In small group tutorials with different videos used at different stages of training" (*RK07). Another interviewee made similar comment: "*I think it's quite a complex idea and it needs a lot more – I think two hours, probably,*

should be the minimum for that workshop. And it should be, probably, in small groups with a lot more facilitation…(Int.1-02).

Commenting on tutor notes there were those who considered that the questions in the tutor notes were very "*complex- difficult as a facilitator to understand*" (RK09), and this might preclude any discussions. Thus it would be better if the "*questions following the videos could be simplified*"(RK07). It would be better to use the tutor notes as 'prompts':

"The questions from the tutor notes (question sheet) are quite complex and might "stifle" debate/discussion amongst students….perhaps use them as prompts rather than a worksheet?" (RK03).
The above situation would arise because *"the questions often require reference to policy document and the students may not have an in depth knowledge of and therefore require additional help from the facilitator" (RK05).*

Some were of the view that the discussion on the videos could be left open and *"students can draw their own conclusions, facilitated by a tutor" ;* though there were those who thought the *"tutor notes highlight possible virtues for discussion"(*PMC-Nov w'shop*).* Another format found useful for trainees would be in "debriefs" sessions according to one participant (PMC Nov W'shop).

As part of the formative evaluation this feedback has led to an update of the tutor notes for the 'beta' version including the format as smaller break out groups in debate rather than whole classes of up to 400 medical students as is the case at Birmingham MDS.

Career stage applicability

Most participants who were responsible for teaching gave suggestions regarding when (and where) these resources would have the most impact. However one practitioner who had graduated in another country but now came to work in the NHS also had a suggestions in regard to foreign medical graduates or doctors who come from overseas: "*course can be integrated in to the induction programme for doctors new to the UK (international graduates)" (CT-01).*

There was no one stage that was advocated. The suggestions ranged from "*introduction to OT in first year, where professional reasoning is introduced*" (OTMC02); or maybe after year 2(RK01;RK03); RK03 also suggested year 3 would be good place to introduce these videos, or year 4/5 (RK01 and PMC Nov w'shop), or even "sprinkled over any level of training"   (PMC w'shop). Thus these can be used at "*different stages of training* (RK07) (Table 1)
Some suggested that the videos would be more useful once the students have had some basic understanding of ethics (a point raised above) so then in " year 2-to build on the basics of ethics from year 1, or, year 4 when they have been exposed to clinical situations in CP1 and CP2" (RK01; RK05).
Emphasis was that the use of these videos would be better early on especially when discussing complex clinical decisions –*"to highlight the grey area of medicine" (*RK02) and consensus was on years 2-3 (RK03; RK01)
However there were other suggestions: perhaps when clinical duties begin such as foundation year , ST 1-2 (part of communication skills) or at ethics workshops (PMC Nov w'shop) . Some were of the view that these can have "*potential at undergraduate and postgraduate medical teaching*" (PMC-Nov W'shop).Using these resources in problem –based learning was another suggestion (FoFw'shop-03).

These videos could be used during training courses on *"communication skills and such scenarios can be played on to them at that time, and also in the OSCEs and the students may have medical students, or the trainees have to prepare for their exams and things, and such scenarios are played out, so it would be useful for them (Int.3-01)*

The table below gives the tutors' view on the spread of career stages that the resources can be used. The pilots and other events did use them at all these career stages and the general consensus was that they were possible to embed into medical education programmes and CPD programmes.

Table 2: Career Stage and Programme Applicability	
Participants	**Career stage**
RK02	Early on in the course
RK01,RK03,PMC-Nov.w'shop	Year 2
RK03	Year 3
RK01;PMC-Nov. w'shop	Year 4
PMC-Nov.w'shop	Year 5
RK07	Different stages of CPD training
PMC-Nov.w'shop	Foundation Year 1 & 2 and Specialist Trainee 1-2 (part of communication skills)
PMC-Nov.w'shop	Undergrad and post grad medical teaching. Inter-professional Education (IPE) teaching would also benefit
PMC-Nov.w'shop	Medical students; ST in Family Planning (FP);GP team leads ; Local GP networks/ Community Education Provider Networks (CEPNs)
CT01	Course integrated into training of foreign medical graduates
FoF 03	Post graduate trainees
FoF 08	After medical degree
Int.1-03	Undergraduates and overseas graduates
Int.2-01	Undergraduate level

This suggests that the resources are considered applicable at any stage of a medical career by the tutors.

Theory and praxis
The transition from a theoretical framework to practice in the real world is important for many of the participants:
"A lot of the information had been delivered before, especially from the first set of slides – it would be more helpful to give a very brief recap of the info, and then apply it to different clinical scenarios since I think the translation from theory to practice is more difficult, especially with conflicting approaches" (B2-3).
A link between virtues and different forms of professional reasoning was considered important: *"it would be interesting to consider how the virtues are linked to the types of professional reasoning ….e.g. pragmatic, interpersonal procedural" (OTMC02)*

The effect of the virtues exhibited in the videos (and the discussion that ensues) was considered relevant to practice as it helped with their *"clinical reasoning"* (OTMC10). This point leads onto the Level 3 evaluation findings in the next section.

4.2 Level 3 Evaluation Findings

In order to gauge the changes that may have occurred in the doctors' making decisions or thinking about decisions we interviewed some of those who attended the workshops/ training days or otherwise viewed the videos in their own time. One of first reflections that was reported is that the videos helped engage with patients and /or their relatives to enter into a discussion regarding the treatment plans:

"it's made me more consultative... I erm try to get the perspective of the patient and their relatives, get them involved in the decision making process . I think that it has made a difference. I hear their perspective and concerns so it has helped me…" (Int1-01).

The same doctor also realises that although rules and guidelines are important, a balance needs to be struck between what the guidelines require and what the patient wants:

"…stick to the rules/ the medical guidelines strictly or on the other hand, these are the patient's views and we bend the rules so the advice to people is to seek to balance in between…" (Int1-01)

By way of explaining what was meant by this the doctor gave an example:

"there was a particular instance where a woman with Deep Vein Thrombosis where we did some tests and we were waiting for results and she wanted to go home to attend to her kids at home, I tried to persuade her to stay eventually we reached an agreement, ok, you can go home and as soon as we get the results I will put a call through to you and you can come back I will put a phone call through to you and you can maybe come back to us and she was happy with the decision" (Int1-01)

According to the interviewee he would have in the past acted differently:

"In the past I would have insisted that she had to wait for the results" (Int1.-01)

The workshop sessions that used these videos helped reinforce the virtues of 'good' practice:

"It is a good thing to seek guidance… I was doing it before, but after the advice from the session reinforced it so I am very comfortable doing it" (Int1-01).

One experienced doctor felt the videos have made him aware of the importance of making something that is implicit, explicit:

"I would say that the videos have helped make some implicities in my practice more explicit. What I mean by that is I think I was taking into account a lot of things that we see in the videos already, however are now better able to talk about stuff" (Int.3-02).

The videos and the sessions help, according to another doctor, to critically evaluate the decision made – as to why *this* particular decision is a good decision. As a mentor who is involved in training junior doctors, exploring different facets of a situation and come to a decision that works well for *this* patient are important:

"Where that has been really useful for me and I have used this, is in explicitly being able to talk to the junior doctors who come to me for advice about why the thing that I think is right, has come to be, and then to show them the different ways that I am thinking about the same problem" (Int.3-02.)

The way Int.3-02 does it now is to encourage junior doctors to be more person/ patient- centred rather than acting on being just legally right. Narrating an episode where trainees might make a cautious decision to avoid criticism, Int.3-02 explores all aspects of the decision to come to a decision that is right for *this* patient:

"It has maybe changed the way I look at it. I am much more explicit about taking into account various aspects of the decision making process …We might have a patient who, they [trainees] come and see me, and they think the right thing for this patient is to be admitted. And, I look at that same patient and the same story, and I think about them, and I realise that I am looking through a whole bunch of lenses that they aren't privy to, so that they can see it through, 'This is what the evidence is, and this is what feels safe to me'. And, by feels safe to me, I think they sometimes mean it feels like they are not going to be criticised for this choice, rather than what is necessarily the safest thing for the patient. And, we get that when you start to tease it out." (Int.3-02).

Viewing these video series adds to the decision-making repertoire as they help unlock varied aspects of wisdom. For instance, said Int3-02:

"Every time I go through that process I feel as though I unlock a little bit more of the path towards being able to articulate wise decisions. Whilst I don't necessarily, or may not feel like it is making me make wiser decisions, I think being able to articulate things better means I probably am making wiser decisions" (Int3-02).

Viewing these resources has helped in critically evaluating and exploring different facets of a situation and come to a decision, and then analyse the decision made:

"I feel far better able to now get into the conversation with them about understanding it from their evidence-based perspective. But also adding other evidence into it like, for example the evidence of harm that hospitals cause just by being hospitals, just by admitting patients, the opportunity cost that comes in when we bring patients into hospital and start to investigate them in ways where they are maybe having one or two tests a day but they are stuck in hospital and they don't actually necessarily need to be there, they could be at home" (Int.3-02).

They help in making junior doctors understand the importance of shared decision making by enhancing/respecting patient autonomy:

"Understanding in a more explicit way a patient's right to autonomy and helping the patients to co-create the best decision for them, rather than the one that feels safest from a purely biomedical perspective" (Int.3-02)

As a tutor/mentor, this interviewee finds that practical wisdom can be explored in conversations with junior doctors, helping them enhance their understanding of what is the best action/decision to make guided by virtues and wisdom. Here both our modified version of the Kaldjian *phronesis* approach which is covered in the introduction seminar and the virtues that form the wisdom wheel help:

I am much more clear about talking about concrete facts at the beginning of it and then beginning to talk through the values and the virtuous acts that take us in that direction… And, being able to do that with the junior staff. So, truth is, we often talk about.[I]t feels self-evident that the truth is the right thing, but there are times when the truth can be overshared… the truth of what we think this might be, when actually we just simply don't know what this is, and that is a version of a truth, rather than a whole truth… but that is what people latch onto, and we cause them distress" (Int.03-02)

Discussing these materials, another tutor, who is in charge of GP training, commented on how these materials, since these are based on real experiences, resonate with practitioners. For this person the materials have been useful in introducing the concept of practical wisdom to the trainees:

"Quite massively actually… I think this is a nice way of being able to sort of have a structure to it, because we've always just stuck to the four ethical domains, going through case-based type things. This is a much better way of extending it to the virtues and thinking a bit more broadly about it" (Int.01-03)

Another experienced doctor stated that the challenge around ethics is not for people to *know* what the ethically right action is but how to *act* ethically in a situation. *"The challenge around ethics is not things that you've necessarily rehearsed…You know, if somebody goes on training, and you see how much they've taken on of the training when they're actually in the battlefield"* (Int.2-01).

According to Int.2-01, these resources help in engaging in ethical discussions with other colleagues: "*There are a number of colleagues from completely different backgrounds who actually can engage with this sort of discussion as well" (*Int.2-01). Talking about the applicability of virtue ethics in varied cultures/contexts, this (Int2-01) doctor also commented that: *"Yeah, that's right, and I think it's counter-intuitive that you can't teach virtue ethics… It chimes exactly with a variety of cultures"* (Int.2-01)

This resonated with another interviewee who said: "*this was a new concept, for instance, but it rang true to what I already felt… teach my trainees about the four ancient virtues that the Greeks talked about anyway – about temperance and honesty and courage and justice... what makes a good doctor and how doctors need to use philosophical knowledge to help themselves and their patients"* and was of the view : "*that's what makes the modern teaching so valuable. We should mix east and west knowledge together*" (Int1-02).

Two further impact themes have emerged since the initial data analysis was carried out and these are related to 3) the influence of the resources on policy groups and 4) wider societal impact. These two are now expanded on in the next two sections.

4.3 Strong interest from policy groups and professional bodies in the field.
Policy groups and professional bodies related to medical practice and wider healthcare education have interacted with the research findings and are interested in how they might include in policy guidance to practitioners. One example is that the General Medical Council (GMC) invited the research team to present the work at their headquarters in Manchester with a live webinar link to managers at their London HQ on 25 January 2019. The GMC are in the midst of policy guidance updates and they requested a further presentation at their London HQ. One of the GMC officers said

"We remain very interested in this research and its outputs and we wondered if [the PI and his team] would like to come to GMC HQ so we can hear more about the findings and…other work that you may be doing and which might be relevant to us…this work was timely in the sense of our review of our Consent guidance".

The Royal College of GPs (RCGP) CEO asked the PI to present the findings to their Medical Director on 12 September 2019 and their CPD Manager. The response from the RCGP has been very positive in terms of them wanting to raise awareness and test out the resources with their Faculty Leads in parallel with a formal endorsement application.

Health Education England (HEE) has sent representatives to our workshops and conference presentations and they have also asked for access to the resources. The Royal Society in Medicine (RSM) invited the PI to run a CPD workshop on 12 June 2019 for a group of 20 Doctors as part of a CPD workshops day. One of the doctors, a senior partner in a GP practice, said afterwards to the PI: *'This was the most practical and useful session of the day'* That GP also said they felt confident to use the resources in their practice.

4.4 National and International Societal Impact
The research findings are starting to have wider societal impact in the UK. Three examples are described here. First, through the change in the way doctors make decisions for patients that also considers wider community wellbeing. This is an inherent feature of applied practice virtue ethics/ *phronesis* theory and debate. Second is through the ongoing work with policy and professional bodies in the field of medicine that have requested CPD workshops and presentations to assess policy inclusion and raising awareness with their members. Third, the research has influenced the curriculum within HEIs for other healthcare disciplines e.g. students on a post-graduate MSc programme for Occupational Therapists (OTs) used the materials in their second year. The feedback was that the resources are highly applicable to their discipline.

On the international stage the resources are also starting to impact on leaders in other sectors that have international wellbeing responsibilities. The PI presented the original research at the *International Studying Leadership Conference* (ISLC) at the end of 2018 and that sparked interest from other sectors. Two examples emerging from recent meetings with interested parties are outlined here. First, interest from the UK Merchant Banking sector with an offer made to the PI to meet Merchant Banking advisors. Their proposed idea is to develop a similar approach (research, film production and moral debate resource) tailored for their use. The sector's ethical decision-making is associated with multinational corporations and high net worth individuals and has considerable international impact. Typical decisions include aspects of international financing, underwriting, real estate, trade finance, foreign investment, consultation on trades and trading technology.

Second, an advisor to the UK government's Department for International Development (DfID) who reviewed the resources on the project website thought their non-prescriptive nature means they are more likely to be embraced and used by DfID members. This has the potential to improve ethical decision-making and impact on the wellbeing of people in the countries supported by DfID. The advisor has already discussed the use of the resources with the DfID members and felt confident that the government would be interested in taking this forward. The DfID connection will progress with the writing of a paper tailored to their interests. Engaging other leaders from internationally influential groups is expected to build in the same way as Merchant Banking and DfID.

5.0 Discussion

The critiques of evidence based medicine (e.g. Greenhalgh et al 2014) and the call to provide an alternative (e.g. Tyreman 2010) led to the original research project theorising an initial set of 15 virtue continua including the *phronesis* virtue. The virtue continua convey the spectrum of ethical considerations for wise decision-making from the 131 participants in the form of a video series, app and accompanying facilitator notes. The follow on project used the findings in this format to engage the wider UK medical community leading to 72 enquiries. Pilots in medical education, workshops and presentations to all levels in the career progression of a medical practitioner found that the resources positively address the critique and call. The most recent example of take up is the RCGP and we are currently working with them to roll out the resources to their 50,200 UK GP members via their faculty leads. This and the many other enquiries affirms that these resources support the filling of a gap in medical ethical decision-making theory, learning and practice.

Scholarly debates of relevance include an argument for practitioner groups of any practice to develop and use practice virtues in order for them to contribute wellbeing for wider society (MacIntyre, 1981). The other side of the debate against this socialised notion of forming practice virtues is explored by D'Andrea (2006) who cites the original Aristotelian notion of virtues being formed by a natural meta-physical development of the individual rather than a social practice based phenomena. This is a critique that according to Ward (2017: 54) has been addressed by MacIntyre in that he does connect the virtues of the practice community to the narrative unity of the individual by stating '*Virtues, understood as sustaining social practices are, in fact, fundamentally connected to the unity and coherence of the lives of the individuals*'. Curzer (2017: 70) offers a slightly different argument to the individualised notion of virtues by explaining that one practitioner possessing all the virtues in their character is an unrealistic ideal *'one person can have some but not all the virtues'* This argument supports the idea that virtues are best formed as a collective across a practice community. This is the argument that we have built on in the original study and that is now supported by this latest evaluation research project that studies the impact of a developed version of that theory.

The evidence presented in this report aligns with both Ward and Curzer. In other words the framing and use of the fifteen virtue continua derived from the decision narratives of a diverse range of individual doctors has been combined. We argue that this diversity has created a robust, contemporary form of 'collective practical wisdom' for moral debate that supports medical decision-making to bring goods for patients and their communities. The follow on project put the theory of using the fifteen virtue continua as a non-prescriptive contemporary moral debating resource to enhance ethical decision-making practice to the test. The evidence presented here suggests it worked. Specifically, the evaluation research shows that the dissemination and application of the '*Phronesis* and Medical Community' research findings include the following impacts.

1. Enabled medical and some related healthcare professionals to change their thinking and framing of ethical decision making for patients and the wider community by cultivating *phronesis* using the resources from the original research
5. Integrated into medical education the resources allow participants to learn from the research output of 'collective practical wisdom' for ethical decision-making. It has supported the cultivation of *phronesis* in medical under-graduate, post-graduate and CPD programmes.
2. Influential groups in the field such as the RCGP, RSM, GMC and HEE have all seen the resources as part of workshops and meetings and are supportive of raising awareness.
3. Contributing to wider national and international impact on wellbeing for more people is an outcome of improving ethical decision making for medical practice. The work is also has potential to impact on other disciplines beyond medical and the international stage via Merchant Banking and DfID.

Limitations

The original research cohort of doctors interviewed and observed (n=131) is relatively small compared to all the GPs (approx. 35,000) and hospital doctors (approx. 150,000) in the UK so we do not claim that we have been testing the total 'collective practical wisdom' of the UK's medical workforce. The intention was to create a non-prescriptive moral debating resource that can be used by all those doctors to enhance their ethical decision-making.

Only one practice in the many that exist in healthcare, medical, has been researched and tested. Given the argument by MacIntyre (1981) that intra and inter practice debate is required to refine the virtues for each practice then this leaves many more to be researched and tested in a similar way. Decisions made in other healthcare professions and across inter-professional groups including nursing, psychology, speech and language, occupational therapy, public health, social work etc. also contribute to patient and community wellbeing. This was mentioned by the research participants as an important part of the collaboration virtue but the different perspectives of the other professions were not explored and so this does signal the call for further research in this area.

A third limitation is that the original research did not examine purpose or telos for the medical community to any depth. Although it did feature in many of the narratives and is partly discussed in another project paper which is in the pipeline (Malik et al. 2020). Kempster et al. (2011) note that it has been a limitation in leadership studies to date since it is often taken for granted and subsumed in a leadership function. Here it is relevant because for practice virtue ethics and a *phronesis* approach, according to MacIntyre (1981) and Kaldjian (2014) debate on the virtues can only lead to an end if telos is a part of that debate. As explained in the background section unless we are all pulling our carts in the same direction then we will end up shouting and arguing with each other about which is the correct direction.

With a growing awareness of these last two limitations and the research participants in the first study emphasising the importance of consulting with other disciplines we argue that further research is needed to address both of these limitations. This is despite the inclusion of the virtue of *Making Collaborative decisions/ Seek guidance* as one of the fifteen virtue continua which partly addresses these limitations but more work is needed to understand both telos and *phronesis* perspectives for inter-professional healthcare or integrated care groups.

Another potential limitation was time - we did not have time to get the resources fully integrated into packed undergraduate curricula. However, this issue was recognised by the programme directors and for example in the 2020 Birmingham Medical School undergraduate programme time given for presenting the resources was doubled.

In the final section we discuss the ramifications for practice, policy and further research.

6.0 Conclusion

The take up of the research findings in the form of educational resources has been strong with seventy-two people from the dissemination activity showing interest in using the resources. Participants in the pilots evaluated here found the resources impactful in terms of their decision making practice. Medical school educators and CPD programme leads agree that the scenarios and ethical dilemmas posed are realistic and the materials are engaging. This has already led to curricula integration and further formal endorsement application. This moral debating resource has enabled doctors and students to re-frame their notions of ethical decision making using the 'collective practical wisdom' resource. We are not claiming that use of this research resource is a replacement to existing medical ethics education and CPD relating to ethical decision making. Rather that it has responded to a specific call from practitioners, academics and policy makers alike for a *phronetic* dimension to medical ethics education that complements other approaches to ethical decision making with an interactive and contemporary moral debating resource.

Practice Implications:

Nurturing *phronetic* decision making using this resource enables medical students and doctors to cultivate their practical wisdom and to deal with and improve their approach to complex ethical decisions. The evaluation research creates a case to expand the inclusion of this form of narrative pedagogy by drawing on the film-based resources in medical schools and CPD programmes. The practical implications are for incorporation into curricula and in particular in the ethics, communication and decision making modules where

the evaluation indicates that these resources have an impact. Their use by senior medics for CPD with their staff or with peer groups in the workplace is another application which has been and can be taken in GP practices and hospitals.

Policy Implications:

Interest and support from national policy bodies (e.g. HEE, GMC) has been a part of the impact and engagement project. Supporting the process of formal policy inclusion would be the next stage for the project. In terms of substantive CPD educational policy the work is currently being expanded through professional bodies such as the Royal Colleges via workshops and meetings that aim to raise awareness with their members. Moving forward the plan is to establish a virtual community of trainers/ facilitators with the purpose of exchanging ideas about how the resources can be used and improved. A further policy implication is considering where they best sit within curriculums and with the range of other materials and resources used in the teaching of related areas i.e. ethics, law, communication, etc.

Future Research Implications:

This follow on project leads the way in terms of creating a case to understand the different ethical perspectives of healthcare disciplines beyond the medical community; their driving purposes and how they interact in situations that require collaborative decision-making between professions. Inter-professional group working is recognised as a central component of ensuring that people and families experience more integrated care but at present there is little research regarding the ethical aspects and in particular the virtues of inter-professional practice that lead to good and wise decision making. Greater understanding of the ethical dimension will enable health and social care services prepare and support professionals for these new collaborative arrangements and improve outcomes for people and communities. To this end a Bilateral Anglo-German comparative study has been submitted to the AHRC and Deutsche Forschungsgemeinschaft (DFG) on Inter-Professional *Phronesis* (IPP) in Mental Health (MH) Services. Ethical decision-making associated with integrated MH care is the focus given that according to the British Medical Association (BMA 2018) poor MH carries a UK economic and social cost amounting to £123bn a year as well the considerable wellbeing cost to families and communities. Germany has comparative economic and social MH burdens. Therefore, significant clinical, economic and societal benefits to both countries from improving decision making in MH are possible.

Epilogue

We researched one practice, medical practice (still *the* most trusted practice in the UK and possibly the world along with nurses) and conveyed the collective ethos of their ethical decision-making. If this ethos is what makes doctors the most trusted profession in the world then their 'collective *phronesis*' arguably represents humanity at its best. This latest project has found that it is possible to cultivate and spread *phronesis* within the medical practice by using a filmed version of their ethos as a moral debating resource. This research therefore opens the door for any profession in any country to do the same. Whether that be by using this medical practice 'collective practical wisdom' as a starting point or conveying their own as a stimulus for moral debate. If other professions also take part in inter-practice as well as intra-practice debate with a common purpose/good of bringing wider wellbeing for their communities and universal flourishing for people of all nations then the outlook for humanity is promising. We hope that this first step of proving that it is possible to spread and cultivate the ethos of humanity at its best within one profession is the first of many steps to bring wider wellbeing nationally and internationally.

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***Phronesis* and the Medical Community Impact and Engagement Project: Evaluation Timeline and Engagement Event Log**

Evaluation Timeline	Dec 2018	Jan 2019	Feb 2019	March 2019	April 2019	May 2019	June 2019	July 2019
Evaluation forms agreed with Ops Group	▓							
Website set up	▓							
Pilot site recruitment– 2 mailshots and personalised approach	▓							
Review of recruitment and re-targeting		▓						
Evaluation forms on website		▓						
Piloting		▓	▓	▓	▓	▓		
Review of initial data			▓	▓				
Workshop with pilot sites to discuss feedback (29.03.19)				▓				
Analysis of evaluation forms						▓	▓	
Contact with participants for level 3 data							▓	
Final Report of evaluation								▓

Engagement Events

Name	When	Audience	Who is presenting/ attending from the project	Type of Event	Involvement and follow up actions
1st Project Workshop	11th June 2015	Academics, practitioners and policy makers	All	Workshop	
British Sociological Association Annual Conference	8th April 2016	Academic colleagues across the social science disciplines	AP	Conference	
2nd Project Workshop	6th April 2017	Stakeholders and others in the field	All	Med prof/educators/academics	
IME , Ethics education conference (St Catherine's , Oxford)	5th June 2017	educators/professionals/FY doctors	AM	Medical ethics Conference	Poster presentation Presentation for IME V.3.pptx Abstract -Ethics training symposium v.
University of Birmingham MDS Away Day	30th June 2017	MDS staff	CH	Away day/raising awareness of PMC project	Poster presentation Poster%20final%20 version.docx
International Health Conference (St Hugh's College Oxford)	29th June - 1st July 2017	Researchers/ academics	AM and MC	Conference	Paper on interim results PMC presentation for Oxford IHC v3.pptx

Birmingham South Central CCG – AGM meeting	26th July 2017	GPs, Practice staff and members of the public	CW, CT	AGM	Chris Turner and CW : 20 min presentation Stall and café event AGM_BSC_FBA_pres entation-3.pptx
Ethics branch of the Greenbelt conference: common good theme	25-27 August 2017	Ethics academics, medical practitioners, ministers and people interested in what it means to bring wellbeing to more in society	MC	Charles Handy (CH) on ethical leadership plus four other top ethics academics from philosophy, theology and medicine	MC took part in the debate with CH on the platform. Actions: Think about what CH means by local leadership of ethical practice. Also what CH does to promote his books on leadership so well!
MDS + Ministry of Defence event	6th September 2017	Clinical staff in the MOD	AB		Posters produced earlier to be used at this event; CH to double check details with AB
British Academy of Management	5-8 September 2017	Leadership and management academics and practitioners	MC	International Leadership and Management Conference	Presented a paper on the ethics of Mental Health reform leadership. Joined the Leadership and Leadership Development (L&LD) Special Interest Group (SIG) to talk about setting up a health and medical leadership ethics branch. Actions: Organise L&LD SIG event at HSMC. Submit the paper to one of the BAM journals.
Talk to PPG chairs of Birmingham South Central CCG	17th October 2017	PPG chairs	CW	Short talk	PPG Chairs CW.pptx

End of Life Care Research Programme Launch	24th October 2017	Nurse researchers and other academics and HCPs	AH	Promote the PMC project	Banner display
ESRC Festival (Royal Orthopaedic)	8th November 2017	HCPs , patients, carers and members of public	CW, AM, JL	Stall at ROH	Banner
ESRC Festival (QE Hospital)	9th November 2017	HCPs , patients, carers and members of public	CW, AP, JL	Stall at QE	Banner
Final Project Workshop (another one later in the year)	22nd March 2018	Academics and Clinicians and members of the public	All	Workshop	World cafés .docx PMC Final Workshop slides MC v5.pptx
GP Educators Conference 2018	15-16 May 2018	GPs	RK	Conference	
COMET Conference	25-27 June 2018	Academics and Clinicians	MC with CH support	Conference	Communicating & cultivating virtues in communication
Catalyst Scotland Symposium An Lochran Lecture Theatre	21st June 2018	Academics and Practitioners from Scottish institutions			Catalyst Symposium Posdter v1.docx Catalyst Roundtable Flyer Ap PMC Catalyst Slides June 2018 v1.pdf

BAM UWE Bristol	Sept 2018	Conference participants			BAM 2018 Leadership decision BAM 2018 PMC Workshop slides v1
RCGP Annual Conference	5th October 2018	GPs	MC/CH/CW/R Knox CW to co-ordinate	Conference, stall and talk	Stall Poster and presentation. CW to email JO both KNOX thursday 1145 mini theatre 1. Final RCGP poster.pdf
Faculty of Medical Leadership in Management	14-16 November 2018	Mainly senior medical practitioners	MC, AM, CW	Birmingham	Stall poster and presentation. Phronesis poster final FMLM 3 %281%29.jpg
Phronesis & ethical decision making for leaders	December 2018	Academics, practitioners and policy makers	MC	International Studying Leadership Conference Lancaster University	Leadership and Phronesis ISLC MC v
Symposium on Medical Leadership Faculty of Medical Leadership	6th Dec 2018	Mainly senior medical practitioners	MC presented at the request of Mark Exworthy	MBS Manchester	

Symposium on Professional Ethics Faculty of Medical Leadership	5th June 2019	Mainly GPs and Hospital doctors	MC to present at the request of Mark Exworthy	Camden, London	
Research on Medical Leadership symposium for the Faculty of Medical Leadership	April 2019	Mainly senior medical practitioners	MC to present at the request of Mark Exworthy	Park House	
GMC Presentation	25th Jan 2019	GMC policy staff in Manchester and London (Skyped in) HQs	MC, CH, AM, CW	GMC	Phronesis and the Medical Community GMC feedback - Jan 19 - Meghan Early.pdf Inter-Professional Phronesis IPP projec Phronesis and the Medical Community
The Transplant Lecture for the Decision Making (DEM) Module	4th Feb 2019	400 x 2nd Yr Med Students	MC, AM	Lecture	Requested by the module lead to return next year and do a much longer presentation with a debating session to follow

Oxford University Invite/Meet	Date tba	Medical Students	MC	Lecture at Oxford Medical School	
Oxford University Invite/Meet	July 2019	Senior Medical Ethics academics to on the research findings	MC	Run as a symposium in a London Venue	
Faculty Day Presentation	18th Dec 2018	All HSMC staff	MC	1 hour research presentation	
FMLM Leadership Symposium	24th Oct 2018	Conference participants	MC – invited by ME	Stand and presentation to the conference	Incredibly enthusiasm generated for the project and many people signed up to pilot and evaluate the resources
Lancashire Teaching Hospitals: Preston Royal Hospital NHS Trust	29th Jan 2019	Medical Consultant	MC	Meeting	Inter-Professional Phronesis IPP projec Phronesis and the Medical Community
Intercalated Seminar/Park House HSMC	31st Jan 2019	4/5 year medical students	MC	1 hour interactive/ experiential workshop	
OT Masters UOC Carlisle	2nd April 2019	Occupational Therapy	MC	Presentation	OT Masters PMC intro slides v1.pdf

'What does *Phronesis* look like' RSM Conference, London	12th June 2019	GPs and Hospital Doctors	MC, AM, Richard Bosworth – Poster	Workshop abstract for RSM 12 June 201 RSM 2019.pdf	1 hour presentation and workshop at all day event?? RSM slides v4.pdf
IME Conference, Cardiff	24th, 25th & 26th June 2019	Conference Participants	MC/AM	Oxford University/Dr Andrew N Papanikitas/ A primary care ethics conference	Phronesis and Medical Decision Ma
ESRC Festival	Nov 2019	HCPs , patients, carers and members of public	CW, AP, JL	Stall at QE	Banner
RCGP, London	12 September 2019	CPD Manager and Lead	MC attending and meeting with RCGP	Meeting	See Conferences on hard drive - RCGP 2019 Presentation slides for RCGP, Lambeth a
FMLM Nov, ICC, Birmingham (Leaders in Healthcare)	4th – 6th Nov 2019	Mainly senior medical practitioners	MC	Seminar	
The 18th International Studying Leadership Conference - Bristol	16-17 Dec 2019	Conference participants	MC	Conference	Abstract Phronesis ISLC 2019 UWE M Co
International Forum, 2020, Copenhagen (Quality & Safety in Healthcare)	28-30 April 2020		MC	Conference	Not yet confirmed

OBHC conference	15-17 April 2020 Manchester		MC	Conference	Paper and poster accepted

Appendix 2

The *Phronesis* and Medical Community Project: Information Sheet for Potential Pilot Sites

The *Phronesis* and Medical Community Project has been examining the development of wise decision making. Wise decisions don't come about by chance. *Phronesis*, the process of making practically wise decisions is what we asked doctors at all stages in their career about. We collected a mix of stories about what they considered to be good and not so good decision making. Our research involved interviews with 131 physicians at all stages in their career up to retirement. Unpacking what it means to them to make practically wise decisions enables us to contribute to the cultivation of wise decision making at all stages in medical education including undergraduate and postgraduate/CPD programmes. Our findings in the form of a video series offer a resource to allow medical students and doctors debate the ethically wise way forward with their specific situations and patients and therefore help them cultivate *phronesis* (practical wisdom).

From our research we have produced an innovative video series using real life clinical situations from the stories of wise and unwise decision making told to us by our interviewees. This series and accompanying resources including tutor guidance notes are available to pilot in undergraduate, trainee and CPD settings. To accompany the series we have also developed an easy to use internet resource (Wisdom Wheel) to enable reflection and assisting individuals, teams and groups to record and gather experience to enable wise decision making to flourish. A PowerPoint will also accompany the internet resource.

If you choose to participate in the pilot all that will be required is the completion of a simple licence agreement, which can be done electronically. Once your licence agreement is received you will be issued with a link and password to enable you to access all the materials and your details will be passed to the research team who will be in contact with you to discuss the evaluation.

The use of the materials is free at this point. The evaluation is scheduled to be completed by July 2019 after which a nominal licence fee may be charged for ongoing use. If having viewed the materials you decide to use them we would ask that you participate in evaluating them. All that this requires is a simple evaluation form as the tutor/organiser and that you ask all students/ attendees to also complete a short evaluation form. This can be done on-line in 3-4 minutes or a paper version used. These then need to be returned to the research team evaluation co-ordinator (Jennie Oldfield: j.oldfield@bham.ac.uk) at Health Services Management Centre. The on-line form can be sent directly to the team via the website on which it is located. All feedback will remain anonymous. Your comments will not be attributed to you or to your organisation. We may however use non attributable quotes to support our findings and we would like to name the full set of pilot sites but if you wish your site not to be named then please inform Jennie Oldfield.

By participating in the evaluation of these materials you will have the opportunity to connect with other pilot sites and to be involved in the design of the second series.

If you require further information about what being a pilot site might entail please contact:
m.conroy@bham.ac.uk

APPENDIX 3

Phronesis **and Medical leadership**
https://www.birmingham.ac.uk/wisedecisionmaking

Evaluation Sheet for Participants

Thank you for agreeing to participate in this evaluation, your feedback is valued and will enable us to improve this video series and accompanying tutor notes.

Please complete this evaluation and return to the email address at the bottom of the form

Location of the course:
Date of the course:

1. The video series was engaging

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

2. The video series enabled debate regarding wise decision making

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

3. The introductory presentation was helpful

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

4. The accompanying participant notes were helpful

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

5. I feel I now know more about how wise decision making can be enabled

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

6. Over the course of the video series I have been aware that there has been a change in the way I am speaking about and reflecting on my decision making

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

7. I would recommend this course

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

8. In what ways could this course or the materials be improved?

9. Do you have any other comments or suggestions to make?

10. I am a (please tick)

Medical Student (please specify year)	
FY1/ FY2	
Trainee (please specify)	
Qualified GP	
Qualified Dr in Hospital Medicine	
Qualified Dr in Community / Mental Health	
Other (please specify)	

APPENDIX 4
Phronesis **and Medical leadership**
https://birmingham.ac.uk/wisedecisionmaking

Tutor / Lecturer/ Facilitator Evaluation Sheet
Thank you for agreeing to participate in this evaluation, your feedback is valued and will enable us to improve this video series and accompanying tutor notes.   Please complete this evaluation and return to the email address at the bottom of the form

Location of the course:

Date of the course:

1. The video series was engaging :

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

2. The video series enabled debate regarding wise decision making :

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

3. The accompanying tutor notes were helpful :

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

4. The learning outcomes for the series were met

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

5. Over the course of the video series there has been a change in the way some students/ doctors have spoken about or reflected on their decision making

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

6. I would like to use these materials again

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

7. Who did you deliver this 'course' to?

8. How many participants did you have?

9. How much of the course material did you use? If you used only some episodes which did you select.

10. In what ways could this course or these materials be improved?

11. Do you have any suggestions as to when and where these materials might have most impact?

12. Do you have any other comments or suggestions to make?

Date:…………………Name………………………………………………………………………………

Email address:……………………………………………………………………………………………

Appendix 5

Level 3 Evaluation – Topic Guide for those who have viewed or used the *Phronesis* and the Medical Community Materials videos

Interviewer
Take verbal consent and agreement that the interview can be recorded
Confirm you only have a few questions and that the interview will not be expected to last more than 15-20 minutes
Turn on recorder and confirm their consent again for the record
Preamble – reminder of session they participated in and reminder it was about practically wise decision making and included some videos of Drs in training.

Topic Guide
Thank you for the feedback you provided at the end of the session you attended.

- The purpose of following up with you now, at this stage of our evaluation, is to ask you whether anything has stayed with you as a result of the session?

- If you are a practising clinician has it influenced or changed the way you think about decision making? Or the way you think about your practice?

- Can you give any examples of specific decisions where you are aware of taking a different approach?

- If you are involved in teaching or mentoring has it changed the way you introduce or discuss decision making?

- Can you give any examples?

- Thinking about motivation: is motivation important? Why? And what motivated you to do what you did?(when making a treatment plan or care plan) and finally when did the motivating factor come into play/ action (prompt: to initiate the wise decision making or later on to act on the decision made?)

- Do you have any other comments?

Thank you for your help today

Level 3 Evaluation – Topic Guide for those who were participants in the PMC research
Interviewer
Take verbal consent and agreement that the interview can be recorded
Confirm you only have a few questions and that the interview will not be expected to last more than 20-25 minutes
Turn on recorder and confirm their consent again for the record
Preamble – reminder of the research they were interviewed for- that it was to do with wise decisions.

Topic guide:
Thank you for taking part in the research. Were you able to see the video link provided in the email?

- The purpose of following up with you now, is to ask you whether anything has stayed with you because of the video clip / or the discussions that took place during the interviews?

- Has /did the discussion influence or changed the way you think about decision making? Or the way you think about your practice?

- Is there an example of different way specific decisions where you are aware of taking a different approach?

- If you are involved in teaching or mentoring has it changed the way you introduce or discuss decision making?

- Can you give any examples?

- Thinking about motivation: is motivation important? Why? And what motivated you to do what you did?(when making a treatment plan or care plan) and finally when did the motivating factor come into play/ action (prompt: to initiate the wise decision making or later on to act on the decision made?)

- Do you have any other comments?

  Thank you for your help today.

Appendix 6 – Quantitative Results

A total of 65 participant evaluations and 11 tutor evaluations were completed using the standardised evaluation forms.
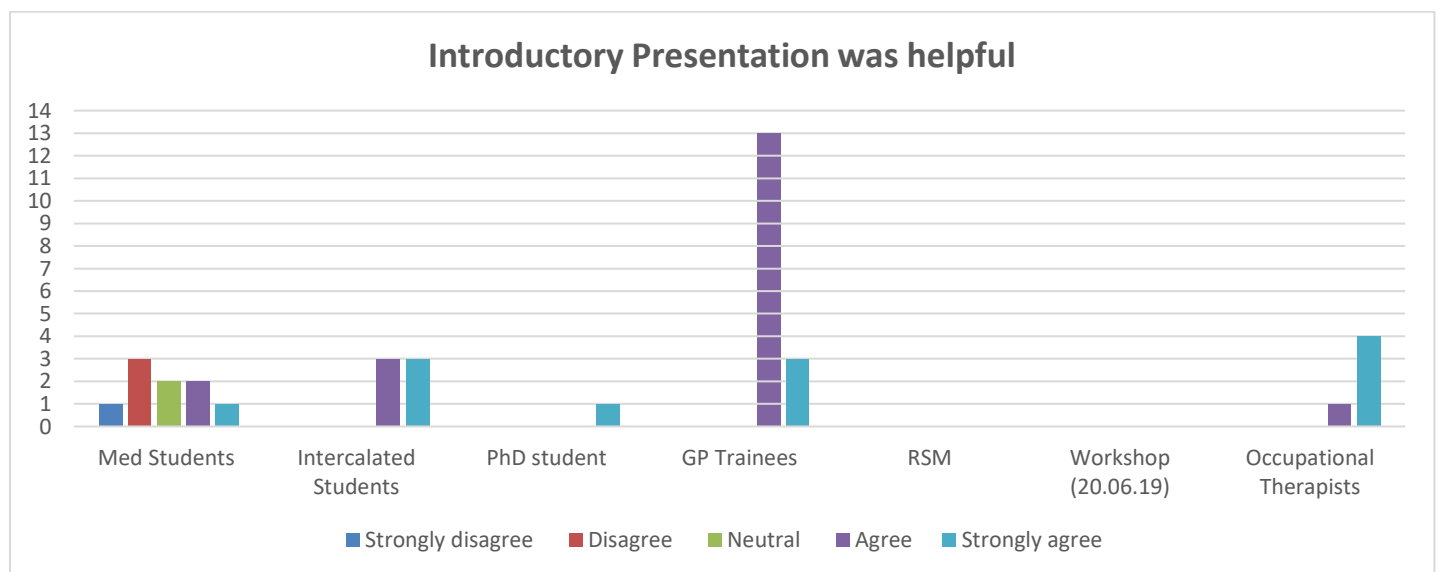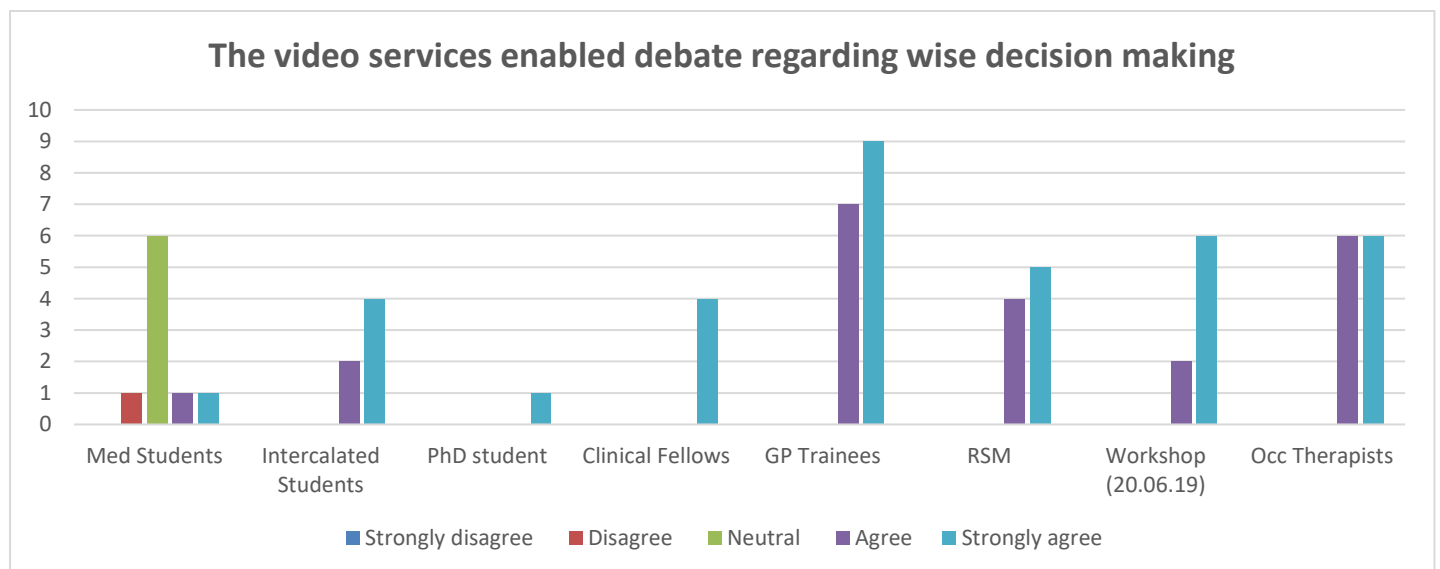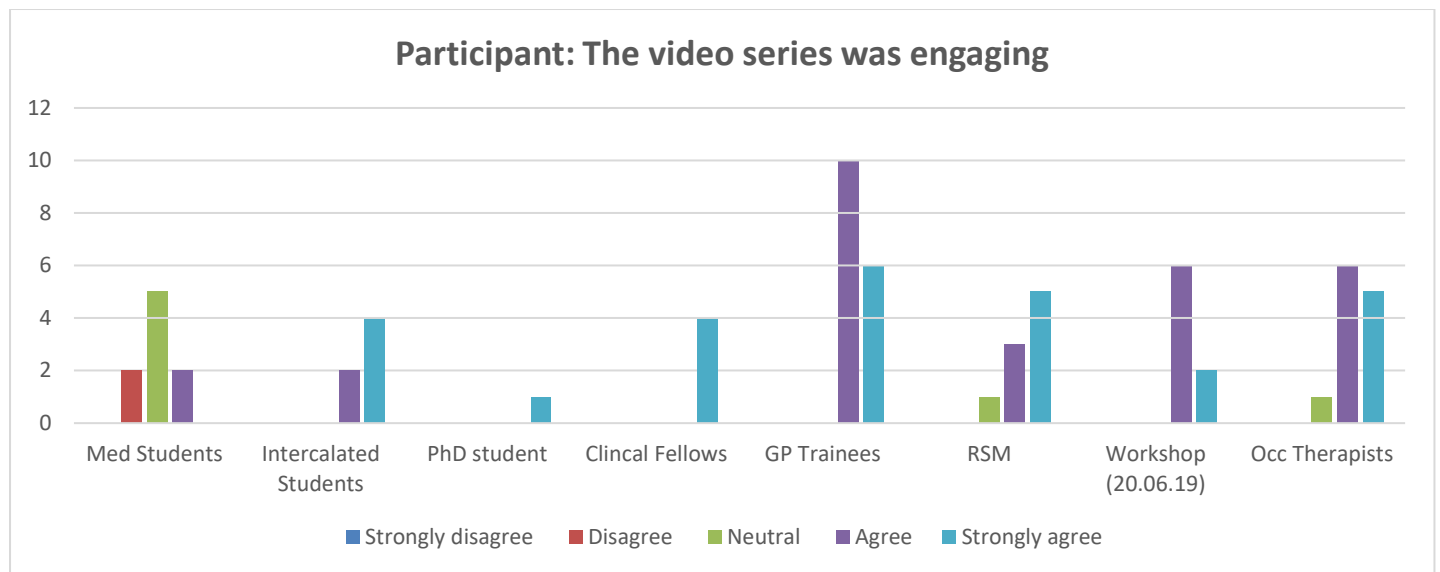
Participant Feedback

Overall, for 65 participants, the scores for all seven questions asked were positive. Not all questions were answered by all participants and in the larger lecture format, the return rate of evaluations was particularly poor. However across all the pilots, the majority of participants were positive about the resources and would recommend the course.

Participant Feedback		
	Strongly agree / Agree	Neutral/ Disagree/ Strongly disagree
The video series was engaging	52	9
The video series enabled debate regarding wise decision making	58	7
The Introductory presentation was helpful	31	6
The accompanying discussion notes were useful	39	5
I feel I now know more about how wise decision making can be enabled	58	8
There has been a change in the way I am speaking and reflecting on my decision making	46	15
I would recommend this course	58	4

Tutor Feedback

The feedback from tutors and lecturers (n=11). Feedback was generally positive, however a number of questions were scored neutrally , indicating either that it was not possible to form a view based on the limited overview of the material or that there was ambivalence about its value or benefit. For example, three tutors and lecturers were neutral regarding the tutor notes and four were neutral as to whether they might use the material again, further light on these scores is contained in their more detailed qualitative comments, where it is seen they generally perceive the material as too complex for medical students in its current format. This project was able to proactively use this feedback to devise a new introductory session, the introductory videos on the project website and to re-shoot episode one to provide a framing for the concept of *phronesis.*
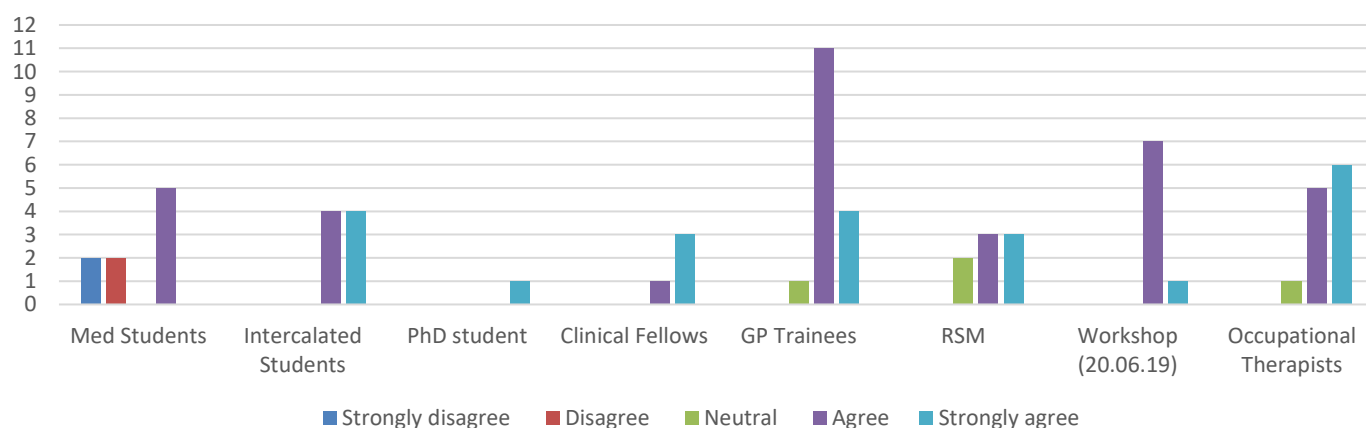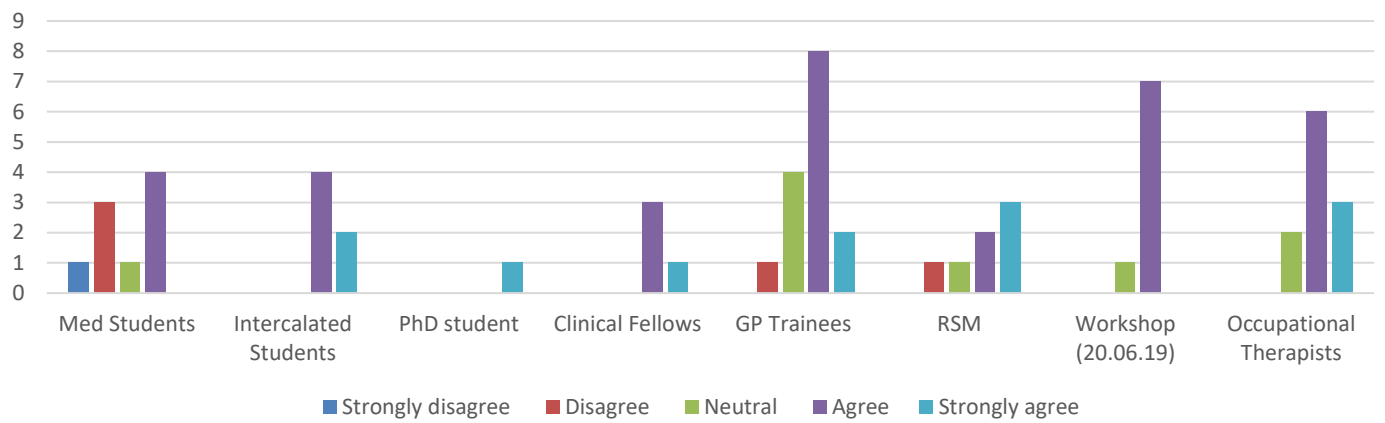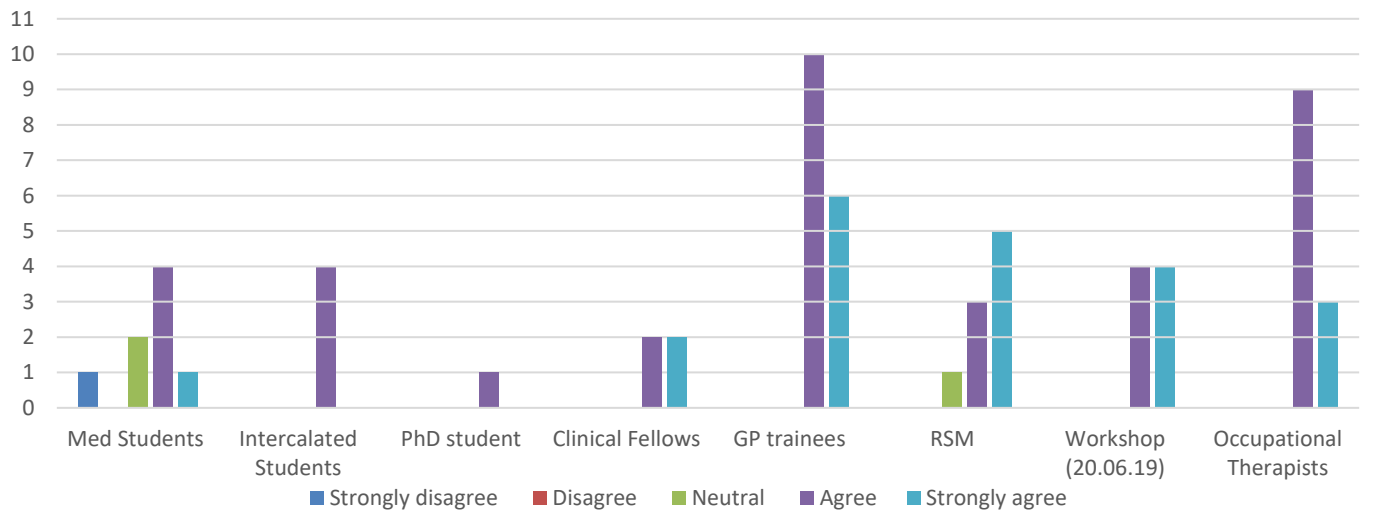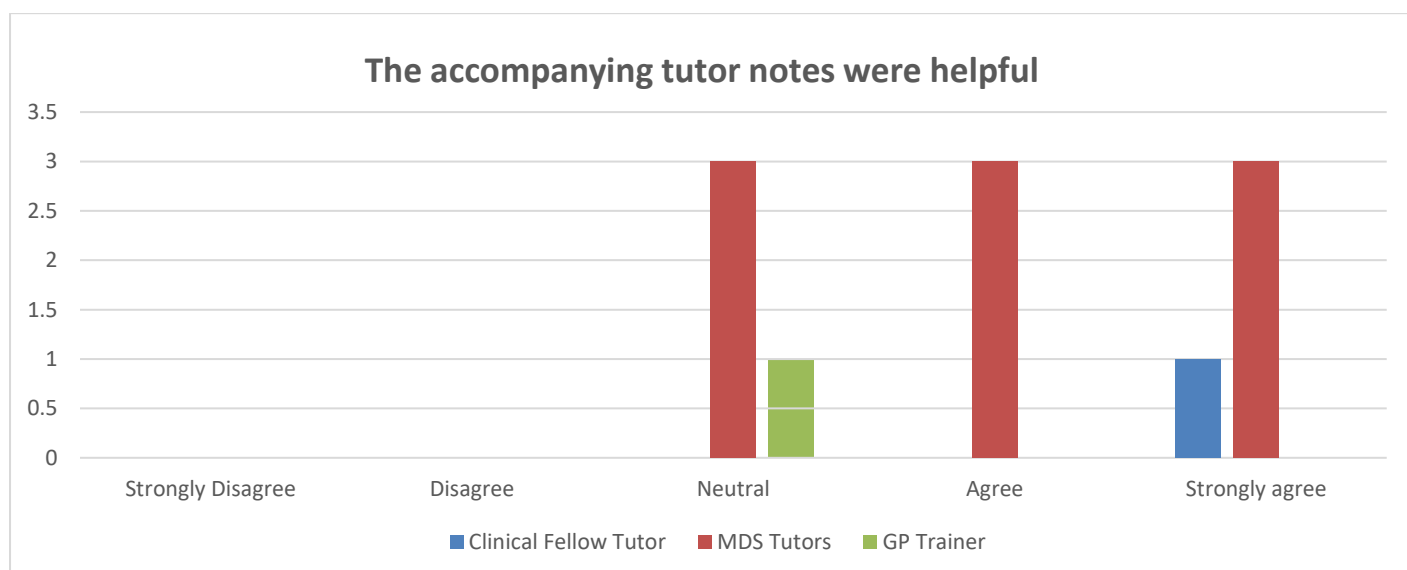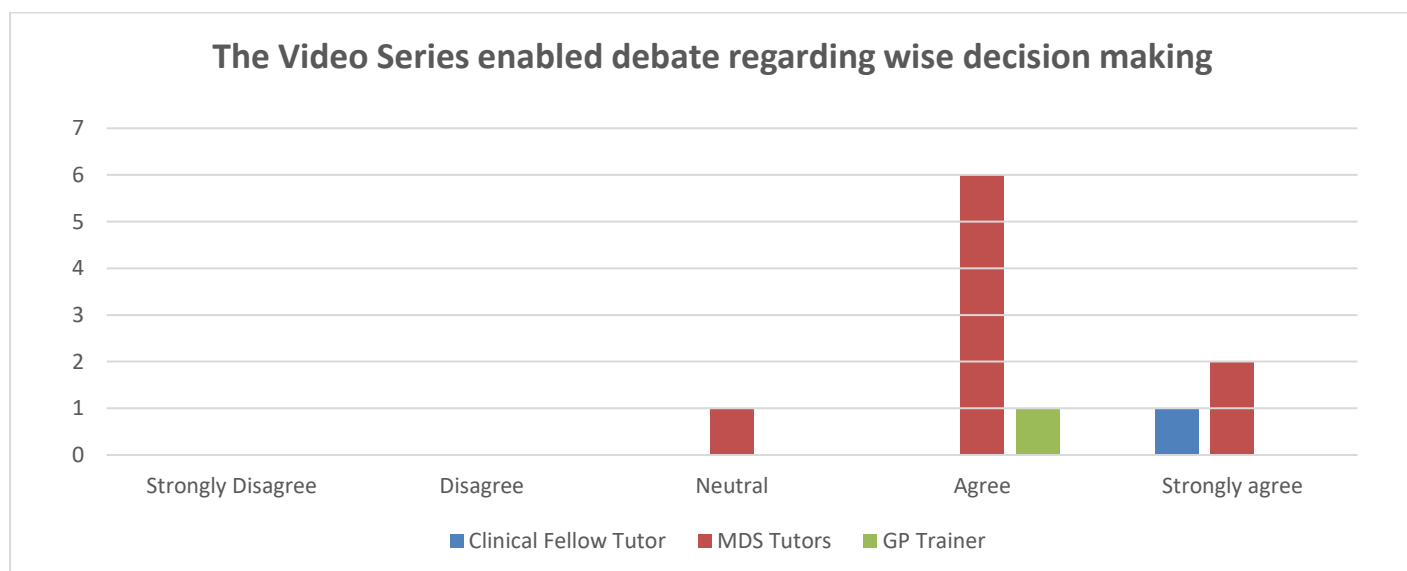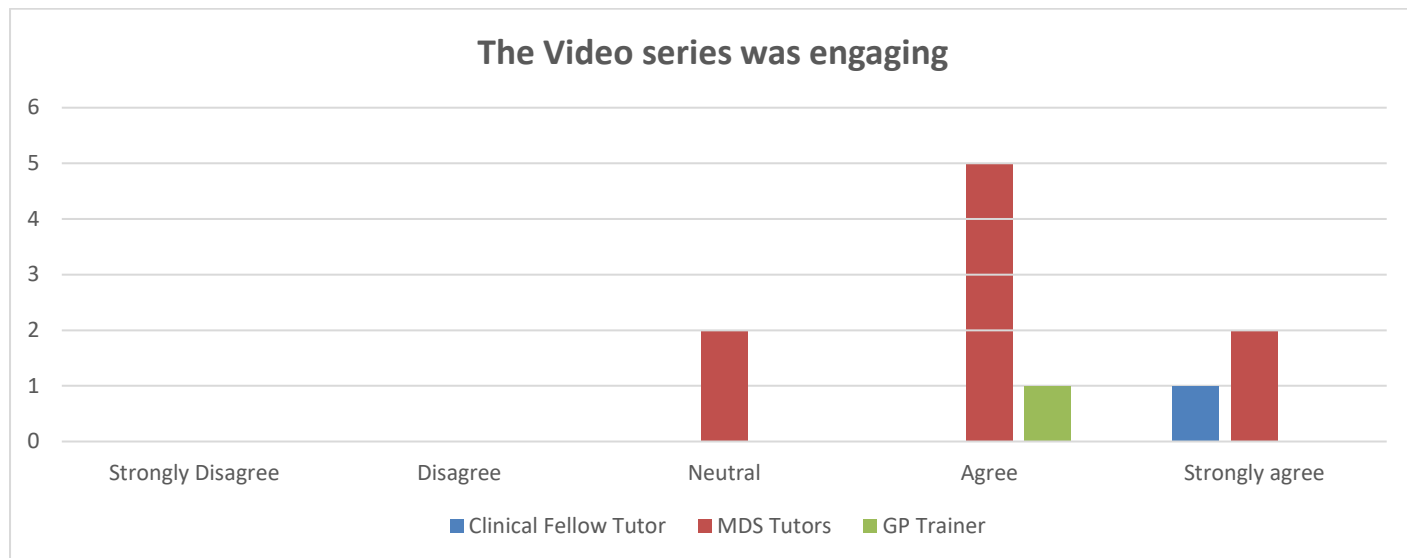
Findings: Participants

Participant: The video series was engaging

The video services enabled debate regarding wise decision making

Introductory Presentation was helpful

The accompanying participation tutor notes were useful (note this question was not asked of all participants)

Legend: Strongly disagree, Disagree, Neutral, Agree, Strongly agree

I feel I now know more about how wise decision making can be enabled

Legend: Strongly disagree, Disagree, Neutral, Agree, Strongly agree

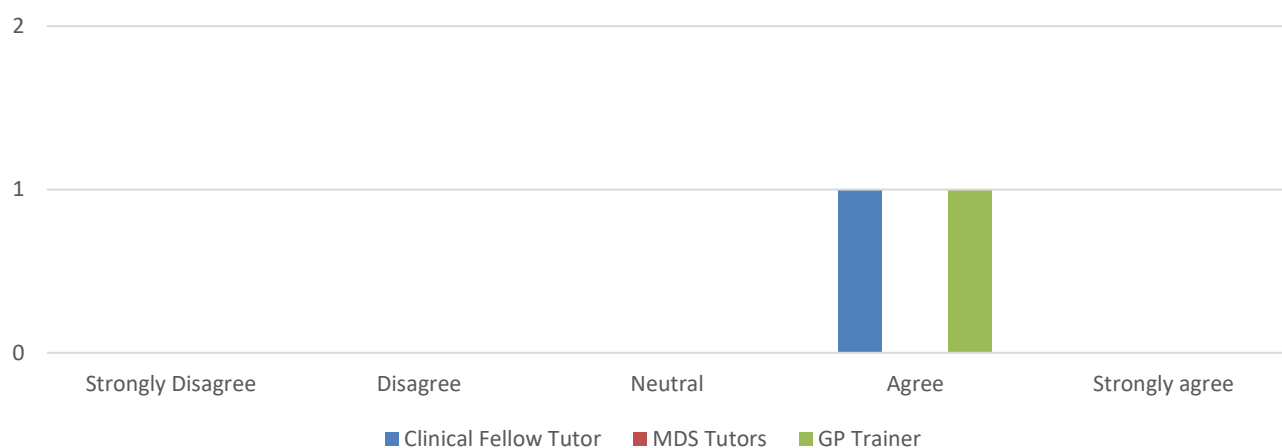**There has been a change in the way I am speaking about and reflecting on my decision making**

I would recommend this course

Tutor Feedback
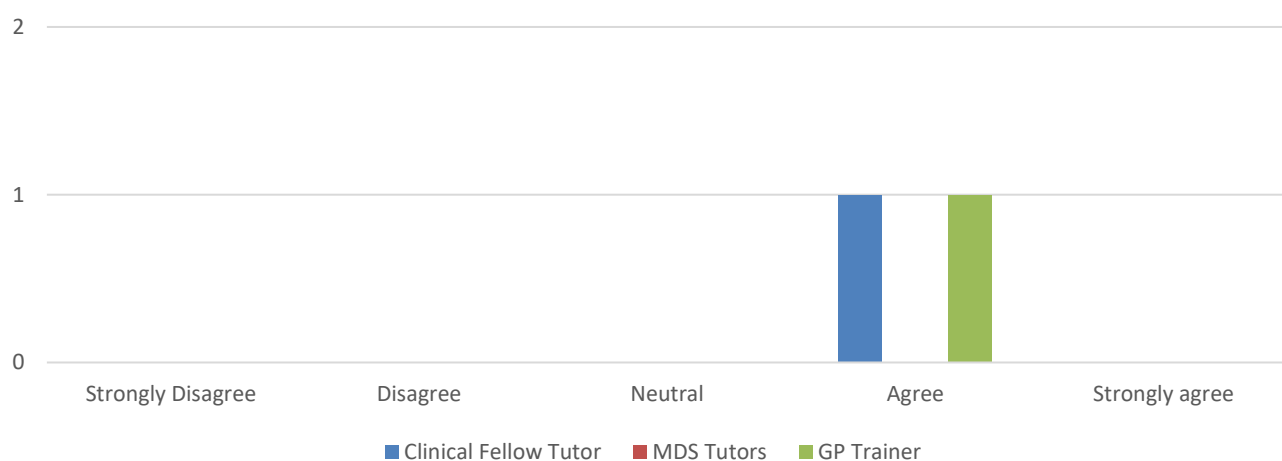
The Video series was engaging

The Video Series enabled debate regarding wise decision making

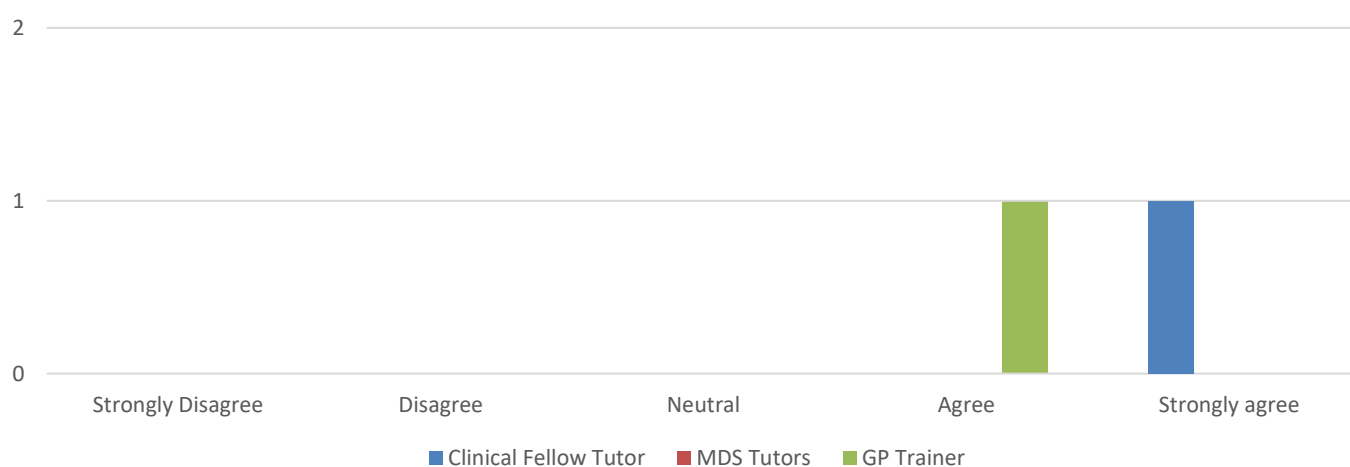## The accompanying tutor notes were helpful

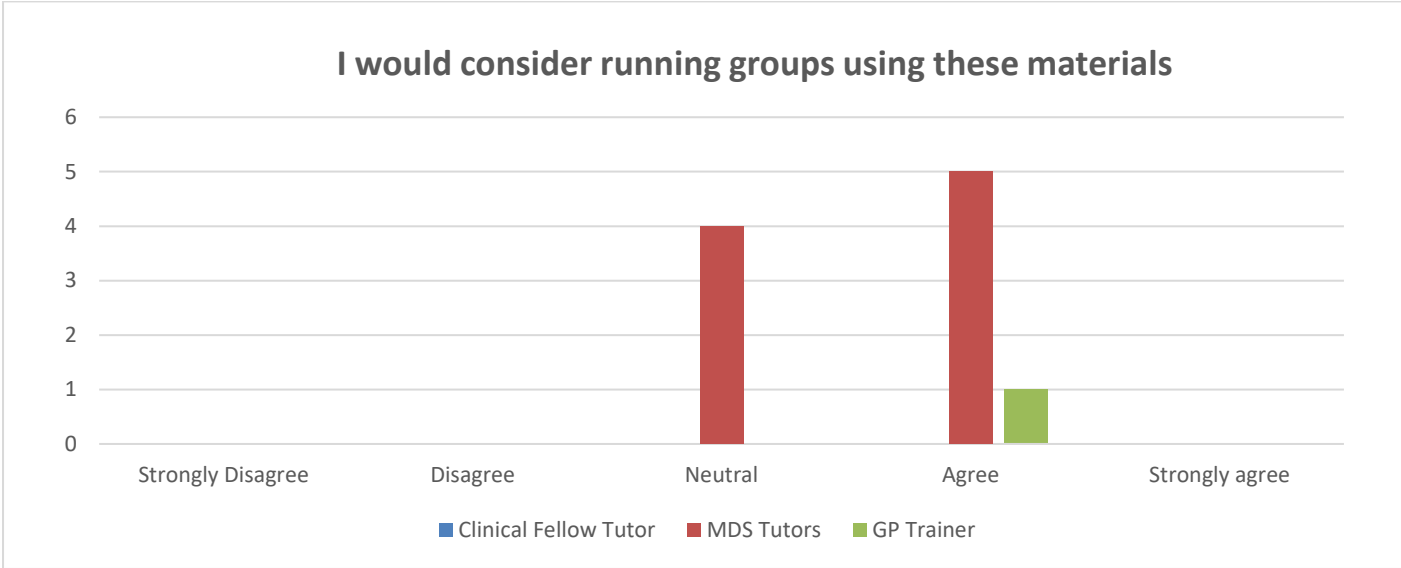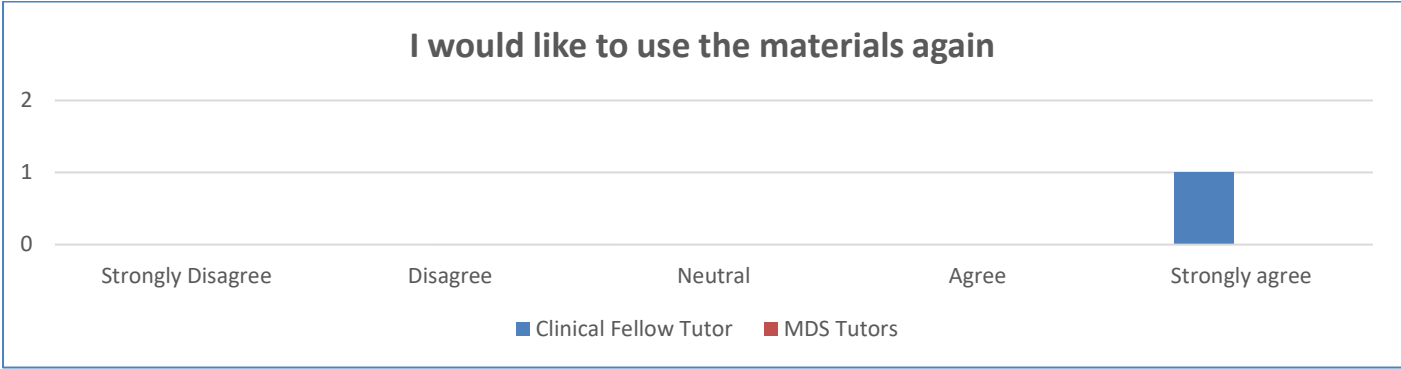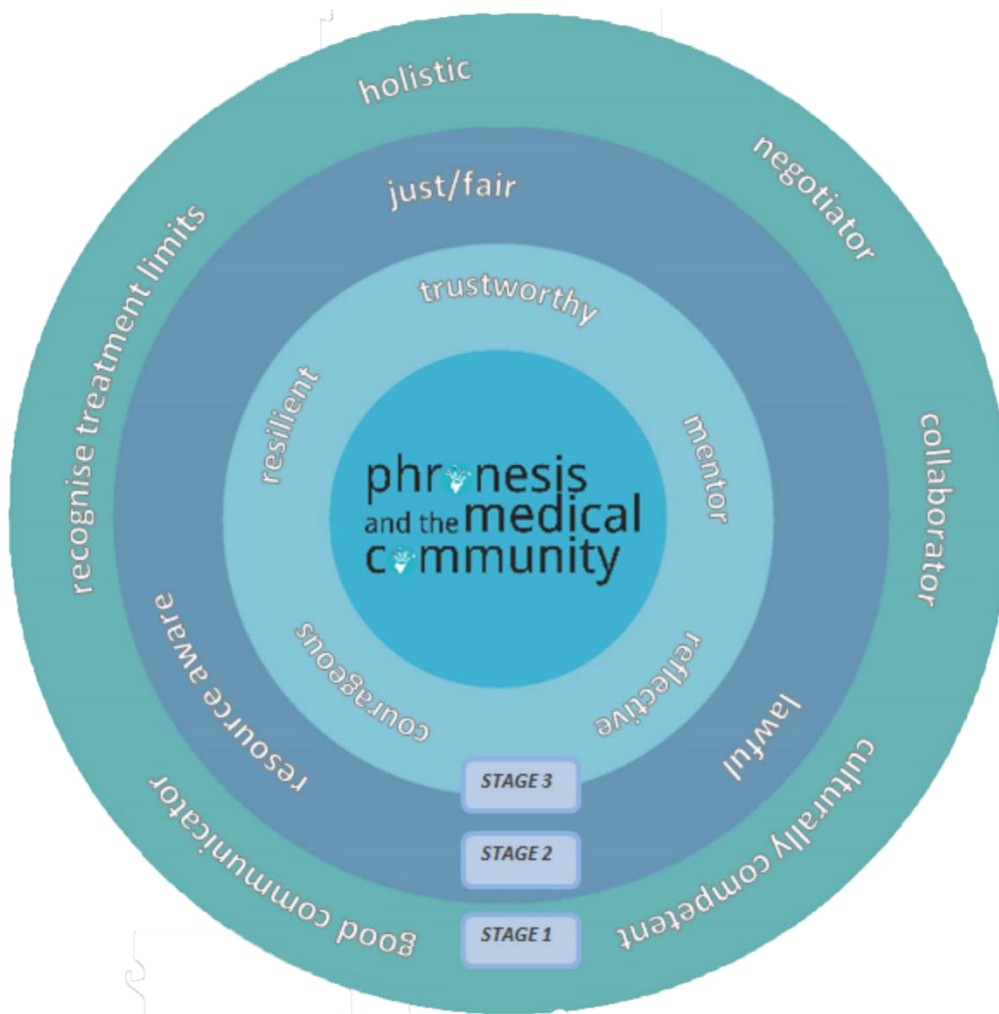## The learning outcomes for the series were met

Over the course of the video series there has been a change in the way some students/ doctors speak about or reflected in their decision making

I would like to use the materials again

I would like to use the materials again

Legend: Clinical Fellow Tutor, MDS Tutors

I would consider running groups using these materials

Legend: Clinical Fellow Tutor, MDS Tutors, GP Trainer

Appendix 7: Medical Wisdom Wheel Application https://phronesis.medicloud.io/

The App shown above when accessed on line allows the user to click on each virtue to show the continuum and typical questions relating to that virtue that the user may want to ask.

The stages 1-3 indicate the following but are not prescriptive in terms of ordering:
- Stage 1: directly related to the patient
- Stage 2: bigger picture/ community/ society
- Stage 3: self and the team

Other virtues not included in the 15 might be considered relevant to the case under consideration and given this is a 'perpetual beta' version we are glad to receive suggestions in order to update the resources as required.