

The Craft of Generalism: Clinical skills and attitudes for whole person care.

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The Craft of Generalism clinical skills and attitudes for whole person care

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Abstract

Rationale, aims and objectives: Generalists manage a broad range of biomedical and biographical knowledge as part of each clinical encounter, often in multiple encounters over time. The sophistication of this broad integrative work is often misunderstood by those schooled in reductionist or constructivist approaches to evidence. There is a need to describe the practical and philosophically robust ways that understanding about the whole person is formed. In this paper we describe first principles of generalist approaches to knowledge formation in clinical practice. We name the Craft of Generalism.

Methods: The newly described methodology of Transdisciplinary Generalism is examined by skilled generalist clinicians and translated into skills and attitudes useful for everyday generalist person-centred practice and research.

Results: The Craft of Generalism defines the required scope, process, priorities, and knowledge management skills of all generalists seeking to care for the whole person. These principles are Whole Person Scope, Relational Process, Healing Orientation, and Integrative Wisdom. These skills and attitudes are required for whole person care. If any element of these first principles is left out, the resultant knowledge is incomplete and philosophically incoherent.

Conclusions: Naming the Craft of Generalism defines the generalist gaze and protects generalism from the colonization of a narrowed medical gaze that excludes all but reductionist evidence or constructivist experience. Defining the Craft of Generalism enables clear teaching of the sophisticated skills and attitudes of the generalist clinician. These philosophically robust principles encourage and defend the use of generalist approaches to knowledge in settings across the community – including health policy, education, and research.

KEYWORDS

complexity, epistemology, generalism, primary care, whole person

1 | INTRODUCTION

Any coherent approach to knowing needs to acknowledge the underlying ways that knowledge is valued (epistemology), rigour is established (logic) and reality is ascertained (ontology). Reductionism and constructivism are clearly defined approaches to knowing that necessarily exclude each other and therefore cannot attend to the whole. As they do not offer an integrative way to see the whole subjective and material human organism, they can cause artefacts, false legitimacy or spurious precision.¹

Generalism offers a way to know that transcends and includes both reductionist and constructivist ways of understanding.² Generalism sees across both the physical science and social science disciplines and therefore is useful in many areas of human society. It is particularly beneficial for professions that seek to be person-centred, especially those who see the person within their life story and communal context.

In health care, there is a remarkable reluctance to acknowledge the integrating force of the generalist gaze.^{2,3} Health policy and practice still moves towards medical care that relies on reductionist forms of evidence, clinical algorithms, biotechnical measures and transactional encounters. These approaches overvalue a narrowed objectified view of a particular body part or system and lose sight of the person as they use empirical evidence that is reductionist, deterministic (prognostic), de-contextualized and dualist.⁴ This linear research dominates clinical practice and health service policy with unrealistic claims of certain evidence built on value-free 'science'. Similarly, constructivist forms of knowledge disconnected from biological reality also fragment knowledge about the whole, leaving clinicians without coherent ways to approach the physicality of their work. Without a coherent scientific and philosophical account of generalist skills and attitudes to knowledge, medical care will continue to be divided into smaller and smaller parts.⁵ This is not simply a theoretical or philosophical concern; it affects breadth of understanding and quality of clinical decision making; it affects reliability of research designed for person-centred care.

Generalism is a unifying way of seeing the person that offers a philosophical underpinning to any clinical care that purports to be person-centred. In the primary care setting, generalism has been defined as:

A professional philosophy of healthcare practice, described as "expertise in whole person medicine". The "expertise" of generalism relates to an approach to care which is person not disease oriented; taking a continuous rather than an episodic view; integrating biomedical and biographical understanding of illness; to support decisions which recognise health as a resource for living and not an end in itself.^{6,p.1}

In this paper, we propose the concept of the Craft of Generalism to translate complex philosophical approaches to knowledge into an understanding of everyday person-centred clinical practice and

research. We draw on philosophical underpinnings of the recently described concept of Transdisciplinary Generalism² to develop a coherent understanding of the first principles of generalist approaches to knowledge. We name these skills and attitudes a 'craft'—a term to describe 'quality-driven work'.^{7,p.24} Craft is work refined through experience for its own sake and the communal good, despite being often 'unrewarded or invisible'.^{7,p.37} This concept of craftsmanship may help to describe what generalists spend their lifetime learning and refining. In the hands of an experienced generalist (not just those in health care), this craft is a sturdy pillar of humane approaches to the person. In an increasingly technological and reductionist soundbite world, this sophisticated discernment linking both evidence and experience is valuable.

A number of the valued skills and attitudes that are part of the Craft of Generalism need no formal explanation to generalists. What is different in this paper is offering them as a set of requisite attitudes and skills in order to manage knowing about the whole in a philosophically coherent way. If any element of these first principles is left out, the resultant knowledge is incomplete or incoherent. We hope these first principles will influence primary care researchers, educators and policy advocates, as well as enabling all generalists (especially family physicians) to respect, describe, hone, value and defend the quality of their own work.

2 | THE PERSON: A COMPLEX WHOLE

Across the ages, except for the Greek and Cartesian dualist interruptions, human beings have been understood as 100% material (or bodily) AND 100% dynamic, social, relational, experiential and meaning-making organisms situated in culture and environment (and some would add 100% spiritual and transcendent). As Eric Cassell describes:

A person is an embodied, purposeful, thinking, feeling, emotional, reflective, relational, human individual always in action, responsive to meaning, and whose life in all spheres points both outward and inward. Virtually all of a person's actions—volitional, habitual, instinctual, or automatic—are based on meanings. Persons live at all times in a context of ever present relationships in which a variable degree of trust is necessary both in others and in the self.⁸

This complex human being cannot be *reduced* simply to an object of study or *constructed* as simply subjective and relational. Kirkengen stated that:

Medical thinking needs to be changed, not by bridging the gap between human subjectivity and materiality, but by realizing that these two were never separate.⁹

Attending to, integrating, and interpreting both these forms of complex knowledge concurrently is the privilege and challenge of the generalist.



3 | REDUCTIONIST BIOLOGY: AN IMPORTANT SUBSET OF WHOLE PERSON KNOWLEDGE

Although social reductionism is also possible,¹⁰ in medicine, reductionist approaches to knowledge are used to understand the body as an object observed by a rational (disembodied¹¹) observer. Reductionism highly values repeatable specificity and assumes the hypothetico-deductive linear causality of the natural sciences (with the notable exception of quantum physics¹² and systems biology¹³). These values are important and have contributed to good quality biomedical evidence, diagnosis, prognosis, clinical decision making, and therapeutic outcomes.

This form of knowledge relies on a disembodied observer (which disqualifies the relational clinician), and the exclusion of complicating variables (which therefore excludes most primary care patients). Reductionism also assumes a mechanistic rather than organismic understanding of the person¹⁴ and ignores the wider systemic complexity interacting with that person.¹⁵ Although never designed to be a comprehensive account of medical knowledge,¹⁶ the capacity for biomedical evidence using reductionist logic to predict and offer certainty has led to a 'paradigmatic monopoly'¹² of this form of knowledge, or evidence, as the basis for medical understanding and decision making.

For any clinician seeking to attend to the complex humanity of their patients, reductionism raises philosophical and scientific concerns about an approach where the body is reduced to a mechanical object of study, devoid of personal meaning and experience, and uncoupled from context and relationships.^{2,17} Frankl defined reductionism as 'pseudo-scientific procedures that take human phenomena and either reduces them to or deduces from them subhuman phenomena'.¹⁸ This can narrow the medical gaze.¹⁹

An overreliance on linear causality and scientific²⁰ views of reductionist evidence has not served the generalist well. They individualize and objectify illness—neglecting subjective experience and socio-ecological determinants of wellbeing.²¹ They often focus on one disease at a time—ignoring the complex causality of illness.²² Generalists describe 'epistemic incongruence'²³ and 'epistemic injustice',²⁴ when trying to apply this kind of reductionist knowledge to whole person care. These limitations are made more obvious in the face of complexity such as multimorbidity,²⁵⁻²⁷ medically unexplained symptoms^{28,29} and social determinants of health. Even experienced family physicians describe resultant incoherent diagnostic frameworks, shame and hopelessness³⁰ that can lead to diagnosis as 'defence against confusion and uncertainty',³¹ and prescription as a way to 'subsume complex problems'.³² Among generalists, the constraints of reductionism have led to demoralization; an uncomfortable sense that we are no longer able to offer comprehensive humane care; and an inability to explain and teach the value of the relational, intellectual and embodied skills of the clinical encounter. Reductionist knowledge is fundamentally important and useful. It contributes to person-centred care when integrated into the person's unique context by the generalist approach.

4 | CONSTRUCTIVIST BIOGRAPHY: ANOTHER IMPORTANT SUBSET OF WHOLE PERSON KNOWLEDGE

Constructivist approaches to knowledge about biography on the other hand, highly value subjective relational and meaningful knowledge formed through collaboration and reflexive consultation. This form of knowledge, although not linearly repeatable is valued because it is authentic, participatory and grounded in the person's real world and community. Constructivist approaches to knowledge use inductive logic, interpersonal and contextual awareness, and participatory critique. This is a contrasting approach to reductionist knowledge—a different epistemic culture³³ with different values and language. Person-centred, patient-centred and narrative medicine approaches are informed by this way of valuing subjective relational knowledge. Any discussion of the process of the clinical interaction and diagnostic process, the clinician as person, or the embedded researcher's influence, values this form of knowledge—attending to relationship, discourse, communication, subjective meaning and beliefs, interpretation, embodied or unarticulated perception, context, ethics, clinical judgement, tacit reasoning and managing uncertainty. These skills are part of generalist approaches, but they neglect biology, and therefore do not attend to the whole person.

5 | TRANSDISCIPLINARY GENERALISM: A BOTH/AND WAY TO SEE THE WHOLE PERSON

Fundamentally, in a whole person, biology and biography cannot be considered separately as an *either/or*. The generalist gaze is not simply a juxtaposition of reductionist biomedical knowledge and biographical knowledge. It is not simply a mixed methods approach to knowledge. Generalism is a coherent craft of attending to a whole^{2,14} using a *both/and* approach to knowing that sees 'all forms of distress as legitimate',³⁴ brings together 'the human experience of suffering and the paradigms of scientific medicine',³⁴ and acknowledges the complex humanity of both clinician and patient. This bringing together of knowledge is a distinct philosophical approach to knowledge of the whole. It is a form of knowledge management indigenous to generalists that needs to be named and valued alongside prevailing reductionist approaches to knowing.

Like generalism, transdisciplinarity uses inclusive logic that values deductive, inductive and abductive (seeking the simplest and the most likely explanation from a set of observations) forms of reasoning and sense making.³⁵ It assumes multiple levels or dimensions of reality, sees knowledge as dynamic and emergent, and necessarily formed in discerning relationship. Philosophical transdisciplinarity³⁶ emerged from quantum physics that includes *both* particle *and* wave of light (and therefore for the generalist, *both* biology *and* biography). Rather than Aristotelian *either/or* logic, this approach invites a *both/and* approach that intentionally transgresses knowledge paradigms and disciplines in order to see the whole. This philosophical approach is

applied in the generalist setting through the newly described approach to diverse forms of knowledge: Transdisciplinary Generalism.²

Transdisciplinary Generalism describes the required elements of a research methodology and clinical method that attends to the whole as: *Broad Scope* (integrative purpose and inclusive scope); *Relational Process* (collaborative understanding and participatory co-creation); *Complex Knowledge Management* (complex problems and coherent integration); *Humble Attitude to Knowing* (emergent attitude and reflexive position); and *Translative Real World Impact* (pragmatic focus, outcome orientation). These required elements are integral parts of the Craft of Generalism.

6 | DEFINING THE CRAFT OF GENERALISM

Bringing together reductionist and constructivist knowledge is not simply considering empirical science and the experiential art of medicine across an artefactual gap; it is an active intentional holding of the integrated whole organism. We propose that the integrative attuned process of 'crafting' is a practical embodied form of knowledge, grounded in relationship, that transcends the limitations of reductionist evidence or constructivist experience. When generalism genuinely offers whole person care, it can offer a way to unify the artefacts and assumptions of a health system that relies heavily on reductionist or constructivist disciplinary knowledge.

The Craft of Generalism as defined in this paper has four first principles that help practitioners and researchers to understand the *scope, process, priorities* and *knowledge management* of the generalist. The Craft of Generalism is influenced by the philosophical coherence of Clinical Pragmatism that sees robust knowledge of the whole requiring *plural* sources of knowledge, *participatory* process, *pragmatic* goals and a *provisional* attitude to knowledge.²¹ It also builds on critical and subtle realism,³⁷ the biopsychosocial framework,³⁸ indigenous approaches to social and emotional wellbeing³⁹ and both philosophical⁴⁰ and pragmatic⁴¹ forms of transdisciplinarity.

The Craft of Generalism requires a *Broad Scope* of knowledge gathering formed in a collaborative and participatory *Relational Process* with a real-world *Outcome Orientation*. Overarching all, it requires a wide inclusive deductive, inductive and abductive logic that acknowledges complexity and the provisional nature of knowledge: *Integrative Wisdom*. In the health care setting, these aspects of the Craft of Generalism can be named as described in Figure 1.

6.1 | Whole person scope

Generalist philosophy values comprehensive whole person care.⁶ This clearly defines the breadth, depth and length of scope of knowledge required to be a generalist clinician.² Being person-centred⁴² and caring for a person within their community over their lifetime, requires a

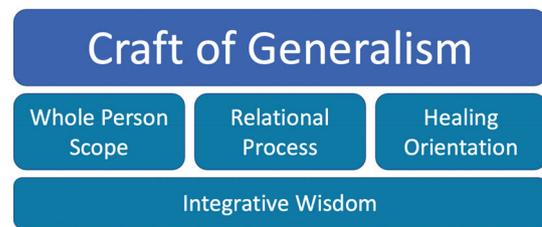


FIGURE 1 Required first principles of the Craft of Generalism

scope of attention that goes beyond disease identification and treatment to include their environment, social climate, relationships, body, inner experiences, sense of self and spirit or meaning.^{43,44} This scope allows transdisciplinary knowledge about the intersection of subjective inner perceptions, meaning, story and culture alongside complex biomedical understanding of the body.^{2,44,45} Whole Person Scope is based on plural sources of information, including both reductionist and constructivist forms of knowing. It therefore includes and values relational, pragmatic and ethical tasks alongside biomedical knowledge.⁴⁶ Generalist approaches necessarily attend to patterns across the whole person that include relational, communal, cultural and environmental context as they intersect with physiology, experience and meaning across the spiral of human development.^{44,47} Leaving any aspect of this *Whole Person Scope* out of clinical, health system and research awareness diminishes the value and reliability of that knowledge. Learning how to attend to that breadth of scope (see Figure 2) is therefore part of person-centred care.

6.2 | Relational process

Knowledge is formed in relationship. Generalist clinicians already know that accurate disclosure, perception and interpretation of information require trust and attuned relationship. The quality of physician-patient relationship impacts patients' functional health⁴⁸ and having been through critical life events together builds relational trust.⁴⁹ The importance of relationship, however, is more than humane medicine or continuity of care.^{50,51} Relationship quality affects the value of the knowledge gathered.

Forming a diagnosis or formulation is an active relational process, attuned to the inner and outer worlds of both patient and clinician, and conducted over time. Formulating diagnosis and treatment goals involves interpreting dialogue and non-verbal communication in a delicate collaborative process to develop a 'shared mind'^{52,p.200} through 'shared presence'^{53,p.240} and 'collaborative deliberation'.^{54,p.158,55,p.48} Relationships among colleagues also offer 'collective sense-making',^{56,p.402} or forming consensus⁵⁷ as an important part of discerning how to use knowledge in complex decision making. Understanding story is a courageous honest and empathetic relational process.⁵⁸ Generalist clinicians routinely incorporate constructivist subjective relational and contextual awareness in medical decision making; they co-construct

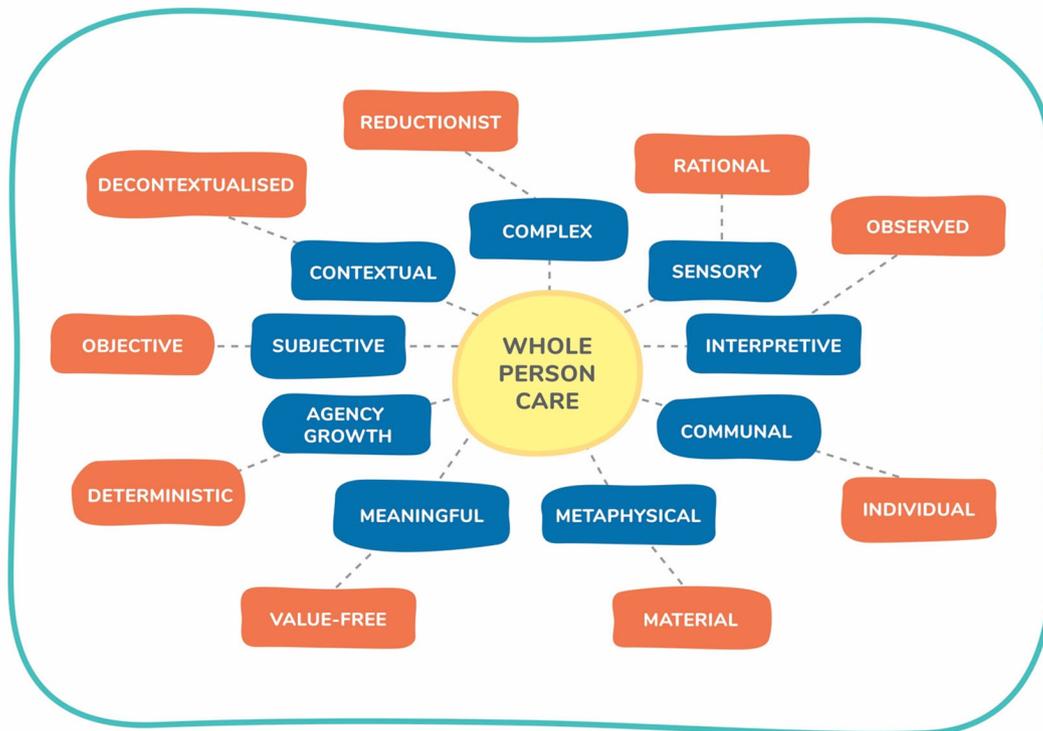


FIGURE 2 Whole Person Scope that includes reductionist (orange) and constructivist (blue) forms of knowledge

knowledge with their patients, they use perception, interpretative logic³⁷ and discernment² in each clinical encounter. *Relational Process* is how accurate knowledge about the whole person is formed. This requires more than communication skills, it requires sophisticated attuned sensory awareness of the other person, and it requires clinical time. It is therefore essential for quality health care that clinicians remain ‘resilient relationists’,^{59,p.341} and resist current time-poor simplistic or mechanistic efficiency drivers in health policy and service delivery that make whole person care a luxury only the few can afford.

6.3 | Healing orientation

The value of information is determined in part by what it will be used for. Generalists see health as purposeful, as a ‘resource for living and not an end in itself’.^{6,p.1} They describe the wide goals of their care: to help people within their communities to live their lives to the full,⁵⁹ to increase capacity,⁶⁰ ‘rehabilitate a patient’s sense of self’.^{61,p.6} and offer ‘relief, repair and meaning’.^{62,p.286} Transdisciplinary approaches to knowledge also describe the importance of a shared goal and real-world ‘socially-robust solutions’⁶³ as a way to prioritize plural sources of information.

So, whole person healing and health orientation is not just a ‘holistic’ way of directing care, it is a logical way to manage and prioritize knowledge. Naming the healing purpose of generalism defines the purpose of any clinical interaction, prioritizes connection with the whole patient, and turns towards those in suffering to help them to connect with what is meaningful in their lives.^{64,65} Generalist

knowledge gathering is purposeful—to ‘develop better, truer, richer, more generous stories and case formulations in the service of healing and coping’.⁶⁶ Pellegrino saw that healing was linked to wholeness: ‘A healing decision is one that will make the patient whole again’.⁶⁷ This aligns with the Old English meaning of the word ‘healan’ which means ‘to make whole’.⁶⁸ Generalists therefore need to remember the purpose of their work as it will help them to resist forces that reduce their work to administrative gatekeepers or case managers, and it will remind them of the dynamic direction and priority of their work—to ensure that each clinical assessment and decision has a *Healing Orientation*.

6.4 | Integrative wisdom

Integrative Wisdom is a sophisticated and complex intellectual and embodied sense-making skill, learnt throughout a lifetime of practice. It relies on inclusive *Whole Person Scope*, *Relational Process*, and *Healing Orientation*. It includes the use of deductive reductionist and inductive constructivist knowledge. It is an active process of inductive foraging⁶⁹ for relevant knowledge that might otherwise be missed. Those that describe craftsmanship describe a process that includes both problem solving and problem finding at once.⁷ Integrative Wisdom includes repetitive hermeneutic cycles of looking *both* wide for illumination *and* narrowing attention to define—noticing *both* the whole *and* the parts, and tuning in to the patterns that connect them.^{12,70,71} This is a sophisticated discernment of what is integral, involving listening, questioning, interpreting, discerning and integrating to get a glimpse of the complex whole.²

Any description here will necessarily be incomplete, as those who study the process of professional knowledge explain: 'the very aspects of a practice that escape observation, rule-making, and explicit routinisation are precisely those that make it valuable'.^{72,p.3} In fact, one marker of this wisdom is the way it values uncertainty—it does not promise certainty. Generalists protect this wisdom when they value the non-expert position,³⁰ eschewing expertise that is deep but narrow. They use this wisdom when they tolerate uncertainty,^{73,74} do not prematurely categorize or foreclose on diagnosis too early,^{75,76} and hold a provisional attitude to knowledge. Generalists describe a dynamic way of knowing that 'recognises the changing nature of illness, uses provisional diagnoses and review, and specifically seeks to avoid contributing to a myth of medical certainty'.^{37,p.8} Transdisciplinary philosophy also sees potential and 'merit in vagueness, uncertainty, and unpredictability because these states serve as prompts for potentialities'.^{77,p.173} This active resistance of the 'lure of mastery',^{78,p.120} is a kind of modesty,^{18,78} a wisdom that continually re-evaluates prior assumptions using curiosity and reflective practice.⁷⁹

Integrative Wisdom is more than pluralism.⁸⁰ It is an awareness of complexity^{81,82} that includes managing attention around clinical priorities. Although it is difficult to describe or measure, especially for those schooled in biomedical reductionist forms of science, it must not be glossed over, simplified, or left out. It is a philosophically robust approach to the diverse forms of knowledge required for whole person care. It is a distinct form of scholarship.⁶⁰ *Integrative Wisdom* is taught through clinical experience and apprenticeship. It involves skills for knowing about biological evidence combined with social science research skills of acknowledging relationships, culture, and context alongside senses, meaning making, narrative and observer bias. *Integrative Wisdom* attends to both forms of knowledge with an understanding of emergence, non-linearity and pattern recognition²² alongside discerning what is most useful and important in each clinical encounter. Although often dismissed as 'unscientific' because it is not reductionist, these generalist ways of seeing are still philosophically robust, and scientific—if we use the definition of science offered by Mc Gilchrist: 'science is neither more nor less than patient and detailed attention to the world'.^{83,p.7} *Integrative Wisdom* is an essential aspect of the Craft of Generalism.

7 | CRAFT OF GENERALISM: PROTECTING THE WHOLE

Unless generalist clinicians and medical educators grasp the sophistication of their craft, its philosophical robustness, and practical usefulness, their contribution to health will increasingly be regarded as merely a conglomerated subset of the less technical aspects of each biomedical specialty. Person-centred care, cross-disciplinary practice, health care research and policy will be diminished unless there is coherent and philosophically robust understanding of generalism as a valid, reliable and authentic unification of reductionist and constructivist evidence.

At present there are practical, professional and theoretical constraints on this generalist craft^{59,84,85} including constraints on time to do this sophisticated relational work. Caring for the whole person remains a need of patients in our communities.⁸⁶ Attending to the whole underpins early intervention, prevention and personalized health care. Seeing the whole facilitates new approaches to complexity. It serves to raise awareness of patterns of pre-clinical and early disease alongside personal and communal resources. This tailored care prevents overdiagnosis, over testing and over utilization of health care services. Using the Craft of Generalism to see the whole person allows patients to trust that they are being seen and heard by someone who has the skills to offer appropriate breadth, relational depth, purposeful enquiry and the capacity to hold these different forms of knowing and discern what is most important today.

Naming and defining the Craft of Generalism may help practitioners to value their own experience, to hone and refine their skills and to integrate, prioritize and contextualize their work.^{27,87-89} This may build professional wellbeing, clinical confidence and motivation. It may redefine medical training by naming clearly what skills are required to see the whole person. It may offer a way to frame patient- or person-centred care that defines the practical scope, process, priorities and clinical evaluation skills that should be part of training and practice.

Awareness of the value and requirements of the Craft of Generalism may also convince policy makers to shift public funding towards practices that give time and respect to the sophisticated relational and intellectual tasks of generalist practice. It could facilitate advocacy for whole person approaches to health, including defining what is good quality generalist practice and research. The Craft of Generalism is a framework that could help research designed for primary care to ensure their methodology is fit for purpose. It could attract medical students into a field that has named its intellectual foundation¹⁷ and prompt integration of generalists as skilled strategic thinkers and doers into health innovation and research teams aiming to translate their work into primary care settings.

The Craft of Generalism has the potential to define and protect the whole of medicine and the people it serves from fragmentation.^{84,90,91} The Craft of Generalism is a philosophical commitment to breadth of scope (*Whole Person Scope*), relationship as process (*Relational Process*), healing and health as a dynamic priority (*Healing Orientation*) and integration and interpretation of complexity as knowledge management (*Integrative Wisdom*). In a reductionist or constructivist world, the Craft of Generalism names something highly valuable to the community: care for the whole person. Refining, honing and teaching this generalist craft will benefit patients and health systems as it becomes a key priority of health policy and medical training around the world.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Johanna M. Lynch: conceptualisation; methodology; writing—original draft. **Mieke van Driel:** conceptualisation; methodology supervision; writing—review and editing. **Pamela Meredith:** conceptualisation; methodology supervision; writing—review and editing. **Christopher Dowrick:** conceptualisation; methodology supervision; writing—review and editing. **Kurt C. Stange:** writing—review and editing. **Linn Getz:** writing—review and editing. **Joanne Reeve:** writing—review and editing. **William L. Miller:** writing—review and editing.

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

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