Supporting Information

Supplementary tables

This appendix was part of the submitted manuscript and has been peer reviewed.
It is posted as supplied by the authors.

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Table 1: AGPAL's approach to the IBD GP Aware project using the six steps of value co-creation

Steps	How this was operationalised for the IBD GP Aware project
1. Identify key stakeholders and increase their willingness to engage	• AGPAL assembled a strategic consortium of influential, interdisciplinary stakeholders with a vested interest in project outcomes, to ensure multi-sectoral value co-creation. This consortium represented CCA, GESA, DoH, AGPAL decision-makers, GPs, gastroenterologists and consumers.
2. Identify and support new co-creation champions	• CCA, AGPAL and GESA identified champions and invited them to serve on the IBD GP Aware advisory committee. This included gastroenterologists (put forth by GESA), a GP (recommended by The Royal Australian College of General Practitioners), a psychologist, a consumer representative (recommended by CCA), CEOs from CCA and GESA, the AGPAL General Manager for Education and Innovation (and project team members), and the project manager from CCA. This group represented the different areas of IBD management, such as allied health, general practice, specialists, a consumer voice, consumer peak body, gastroenterology peak body, and education development specialists. The group members co-created value by initiating the project and developing and delivering the training, and then widely disseminating it via professional networks. • AGPAL also established multidisciplinary content development and review working groups to inform the development of education and training materials (project output). These groups included 14 clinicians, each with their own impactful professional networks in IBD management. Members added their professional lens to the project training materials and consultative interactions so that project outputs were co-created with rigour and with end users in mind.
3. Set up platforms purposefully designed to engage individuals more co-creatively	• AGPAL offered stakeholders rich, relevant interactions via a series of interconnected engagement platforms with a clearly defined scope for collaborating and co-creating value. These were strategic (advisory committee); operational (project management group); and developmental (content development and review working groups), and also engaged champions and stakeholders. Each platform informed itself and others and extended beyond the participant to their own national and international networks and further. Appendix 1 online at MJA.com.au has more information. • Engagement platforms included end user focus groups; co-design and development workshops and approval rounds; document review rounds; national webinars and online training workshops promoted through the consortium and other networks; conference/workshop presentations (pre-recorded and live); informal and formal meetings/ forums; professional publications, newsletters, briefings, websites and social media. • Each platform was highly interactive, focused on value co-creation and user-centred

Steps	How this was operationalised for the IBD GP Aware project
	design, and informed itself and others, extending beyond participants to their national and international networks.
4. Expand the circle of stakeholders and joint value creation opportunities	• AGPAL used the following approaches to engage stakeholders in co-creating the education and training materials: – Focus groups and surveys were conducted with more than 25 GPs and 21 gastroenterologists to explore awareness and use of IBD guidelines, identify barriers and challenges of implementing evidence-based care, and secure input to development of training material. – Multidisciplinary content development groups co-designed and informed education content, while a content review group assured the content throughout the development phases. Each group's membership included GPs, generalists and specialist gastroenterologists, psychologists, IBD nurses, and dieticians. Prestantia Health (AGPAL's appointed subject matter expert) used experience-based co-design techniques to co-design module content, patient personas and case studies. The iterative content development process and review involved scaffolding content, storyboarding content (through Alpha, Beta 1 and Beta 2), building online modules, delivering the training, and evaluating and securing feedback. – Value was co-created during each stage among contributors (personal or professional value creation) and organisations (through gains in improved health service delivery, care coordination and effectiveness of care). Value creation was often extended across networks and membership of consortiums through the sharing of new information and training resources.
5. Engage stakeholders across private, public and social sectors to expand benefit for all	• AGPAL developed a robust communication and engagement plan and jointly implemented it with CCA, AGPAL and GESA and other key stakeholders, to extend the reach and benefit of the IBD guidelines and training resources. This encompassed both private and public healthcare providers including private practice GPs, gastroenterologists, allied health, public primary, secondary and tertiary health services and social care sectors (community-based and consumer-focused IBD organisations) and consumer support groups.
6. Deepen the impact and enable the viral spread of 'win more–win more' value creation	• The IBD GP Aware project engaged key stakeholders and end users throughout the initiative, co-creating IBD education and training resources aimed at raising awareness of the IBD guidelines and delivering evidence-informed care (eLearning modules, digital workshops and interactive webinars). • Stakeholders can deepen the impact and help the viral spread of these resources through their personal and professional networks, ultimately improving IBD management nationally. For example: – CCA is Australia's largest IBD consumer organisation, representing and supporting

Steps	How this was operationalised for the IBD GP Aware project
	85,000 people living with IBD. CCA raised consumer awareness of the project outputs and then encouraged consumers to share them with their GPs and other health professionals.
	– GESA has an IBD faculty of 200 gastroenterologists throughout Australia, with a keen interest in the early identification, appropriate referral and effective management of IBD patients.
	– AGPAL's reach extends nationally, with more than 5,000 general practices and Aboriginal Community Controlled Health Organisations, 31 Primary Health Networks, and clinical and consumer peak organisations including The Royal Australian College of General Practitioners, Australian College of Rural and Remote Medicine, Australian Primary Health Care Nurses Association, Australian Association of Practice Management, and Consumers Health Forum of Australia (raising workforce capacity across primary care for providing improved evidence-based IBD management and patient care).

Table 2: Engagement platforms developed for co-creating the IBD GP Aware project education and training resources

Purpose	Stakeholders and partners	Platform for engagement	Outputs
Review of existing Inflammatory Bowel Disease (IBD) protocols and guidelines	• Australian General Practice Accreditation Ltd. (AGPAL) • Crohn's and Colitis Australia (CCA) • Gastroenterological Society of Australia (GESA) • Prestantia Health • Department of Health • Metro North Hospital and Health Service • Eastern Health, Victoria • St Vincent's Private Hospital • Sydney Gut Clinic • Dietitians Australia • Outpatient clinics, Tasmanian Health Services • Gut Smart • Streamliners NZ (HealthPathways) • The Royal Australian College of General Practitioners • New Zealand Society of Gastroenterology • The Paediatric Society of New Zealand • World Gastroenterology Organisation • European Society for Paediatric Gastroenterology Hepatology and Nutrition • South West London Medicines Optimisation Group: IBD Medicines Optimisation Clinical Network • British Society of Gastroenterology • Faculty of Sexual Health and Reproductive Healthcare, Royal College of Obstetricians and Gynaecologists • Royal College of General Practitioners (UK) • Seattle Children's Hospital • American College of Gastroenterology • European Crohn's and Colitis Organisation	Formal ongoing discussions with partners; informal meetings for data sharing and exchange of information; website visits and analytic data retrieval	A comprehensive report including a list of global guidelines and protocols that general practitioners and other healthcare professionals can access for the management of patients with IBD Review of report by partners and key stakeholders, to inform the next phase of the project

Purpose	Stakeholders and partners	Platform for engagement	Outputs
Development and implementation of surveys and focus groups	• IBD GP Aware Advisory Committee • Partners: AGPAL, CCA and GESA • Prestantia Health (key consultant) • End-users: General practitioners (GPs) and gastroenterologists (GEs) nationally	Consultative spaces to co-create the survey and focus group questions; followed by Survey Monkey and formal online semi-structured interviews to gather information and consult with end-users about their use and needs for IBD education and training	A report of the survey and focus group findings to inform the next stage: the content and structure of the education and training for the IBD GP Aware project
Development and implementation of the communication and engagement plan	• CCA, AGPAL and GESA; IBD GP Aware Advisory Committee; other key stakeholders (developed and jointly implemented) • GPs and generalist GEs, consumers (IBD support groups), allied health professionals, other care providers and stakeholders	IBD GP Aware Advisory Committee and other formal and informal meetings; advisory group meetings Refreshed key messages and information sheet for clinicians and web page content as introduction to articles and other publications, links from website	A robust communication and engagement plan with a specific 'call to action' to GPs and other interested health professionals about evidence-based management of IBD and the education and training available to support them
Development of the IBD educational resources	• AGPAL content development and review groups (including GPs, generalist GEs and GEs with expertise in diet and nutrition, psychologists, IBD nurses, and dieticians) • IBD GP Aware Advisory Committee	Formal and informal consultative spaces involving all or some members of the content development and review groups and numerous opportunities for written feedback Committee meetings to consult about strategic, operational and development of materials Document review rounds (multiple iterations), co-development and design meetings (and approval rounds across the governance structure)	Iterative refinement of the IBD education and training content (modules) and other resources
Feedback on the developed IBD educational resources	• End-users providing feedback: GPs and GEs nationally, registered for the eLearning, webinars and workshops	Online evaluation following completion of each online module and training activity (webinar and workshop)	Feedback from end-users to support any improvements (e.g. improve content presentation, simplify text or layout and additional support resources)

Purpose	Stakeholders and partners	Platform for engagement	Outputs
Promotion of evidence-based IBD guidelines and the developed education and training resources	• Partner organisations and IBD GP Aware Advisory Committee • Webinar participants included: representatives from consortium members (CCA, AGPAL, GESA) and other subject matter experts presenting clinical and non-clinical content, and participants from general practice. • Professional peak body organisations and other relevant stakeholders (The Royal Australian College of General Practitioners, Australian College of Rural and Remote Medicine, Australian Primary Health Care Nurses Association, Australian Association of Practice Management, Dietitians Association of Australia, national Aboriginal Community Controlled Health Organisations etc.), peer support groups, Consumers Health Forum of Australia, Primary Health Networks	National webinars and online national training workshops promoted through consortium networks and other relevant networks (such as Primary Health Networks). These platforms were interactive to allow for engagement and value co-creation Awareness communiques, mailing lists, links to webpages, launch events for education and training resources at conference and other workshops Ongoing opportunities to to gain insights and feedback from end-user engagement with educational resources via informal and formal gatherings and online evaluations	Introduction and continuous updates of the IBD GP Aware project to 100+ practices nationwide during the life of the project Enhanced collaboration with relevant peak bodies and stakeholders to regularly communicate about the IBD GP Aware project and the availability of educational resources
Reporting of evaluations from workshops, modules, and other means of implementation outcomes/learnings	Partners: AGPAL, CCA, GESA, Department of Health, advisory committee	Consultation and input into project progress reports and final report	Co-authored program progress reports to inform each phase of the program design and the final report to inform the long-term use and maintenance of the suite of educational resources
Dissemination of systematic literature review findings and other project findings	AGPAL, CCA, GESA, Prestantia Health (key consultant) and subject matter experts (SMEs) Target audience: GPs and generalist GEs, health professionals, media via publications and journals, delivery partners, professional bodies, and all other stakeholders through readership	Informal meetings for conference abstract and manuscript development Formal meetings, workshops or conference Professional publications, newsletters, briefings, websites and social media	Dissemination of key findings at forums including the GESA AGW 2021 virtual conference; publication of systematic literature review and guidelines/protocols available and used by GPs and other healthcare professionals

Table 3: Development of the Brisbane South PHN Person-Centred Care Program

Steps	Description
1. Identify key stakeholders and increase their willingness to engage	AGPAL and Brisbane South PHN worked closely over a series of project co-design meetings (formal and informal) to identify stakeholders to engage across various settings within the region: • Practice level stakeholders: GPs, nurses, nurse practitioners, non-dispensing pharmacists, medical practice assistants (MPAs), care coordinators/nurse navigators, Aboriginal and Torres Strait Islander health workers and practitioners, and practice managers • Organisational level stakeholders: Brisbane South PHN program staff (person-centred care, optimal care), practice support, clinical, senior management and executive teams • Consumer representatives: PHN-engaged to give ongoing feedback across program delivery • Content development and review groups: instructional designers, copy editors, animators, graphic designers, the project manager and coordinator), each with a role in the education and training development process. Several subject matter experts joined the AGPAL content development and review groups.
2. Identify and support new co-creation champions	AGPAL and Brisbane South PHN identified champions to help co-create the training resources. Subject matter experts were selected for the content development group, including several clinicians, practice managers, practice nurses, and quality improvement and health transformation experts. These stakeholders helped launch and deliver the program and offered coaching. The AGPAL team worked closely with the PHN Person-Centred Care team to identify a suitable content review group. The PHN engaged a team of local primary care experts (champions) specialising in regional transformation to review the training material and provide feedback at various stages. Briefing documents were prepared to help these co-creation champions effectively engage with the AGPAL development process and help shape the delivery model. During the implementation phase: • Practice level champions were either nominated or self-identified to help implement the program. They worked closely with the AGPAL and PHN teams to engage with the curriculum and tools and apply them in practice – co-creating value at the personal level in their clinical role and at a practice level

Steps	Description
	in the service delivery, which extended the value to patients via person- centred care. • Concurrently the PHN person-centred care team worked closely with the other PHN teams (optimal care, clinical, and practice support teams) to innovate and redesign models of practice support, co-creating value within and between each team and with practice champions. • New champions at all levels continued to emerge across program delivery.
3. Set up platforms purposefully designed to engage individuals more co-creatively	• Engagement processes used tools from co-design methodologies to engage the stakeholders. Some of the engagement platforms were purposefully designed to be more formal (project initiation and scaffolding workshops), and some regular engagement platforms were designed for more operational purposes (ongoing project progress meetings between AGPAL and the PHN). Some informal and social spaces were designed (in person and online) for regular engagement during the different stages of the training development (scaffolding, content storyboarding in multiple stages, online build, delivery, evaluation and feedback). • Throughout the iterative development and review process, collaborative consultative spaces and written feedback opportunities were created to engage the AGPAL content development and review groups and the PHN review group. This allowed subject matter experts and all stakeholder to exchange ideas and contribute content knowledge and resources. The AGPAL development team gained a rich understanding of the region during its interactions with the PHN review group and, as such, the co-created materials were deeply contextualised and fit for purpose for the PHN, which cultivated an environment for optimal transformation. Implementing learnings was regular and timely, including applying feedback from the practice leader to the PHN train-the-trainer online workshops. This is just one example of how AGPAL used co-creation and user-centred design methodologies to benefit practice leaders.

Steps	Description
4. Expand the circle of stakeholders and joint value creation opportunities	• During the eighteen month development and delivery of education and training resources, the PHN project team broadened to include other PHN programs and staff and, as the practice support model evolved and matured within the PHN, the circle of stakeholders expanded across the organisation. The train-the-trainer program became a touchstone for PHN champions passionate about the patient outcomes and experience and driven towards the person-centred care model, creating a richer conversation both in formal education in-person and digital workshops and operational and review meetings, which compounded the value of each interaction. • As practice champions engaged in the learning journey (completing the 10 eLearning modules, engaging in the digital workshops, participating in AGPAL subject matter expert-facilitated online forum) and were supported between formal education delivery touchpoints, the value expanded within their extended practice teams as they led person-centred care conversations, huddles and then initiatives, using the program tools to identify and implement data-informed quality improvement activities towards a person-centred care cultural shift. • Patients (and their carers, family and communities) benefitted from the improved service delivery of the practices in the program. In practices where change activity focused on a patient cohort with a chronic condition, co-creation champions took a population management style approach of preventative care, and within these patient cohorts, consumer champions emerged, creating a third level of program leadership – the peer support model.
5. Engage stakeholders across private, public and social sectors to expand benefit for all	• The PHN engaged stakeholders across Queensland and other states by making formal and informal presentation about the program at PHN alliance meetings and other events. These presentations shared experiences of the development and implementation of the education and training and the person-centred care model across Queensland PHNs and other regions where similar models of care were being implemented and where PHNs could use the learning to co-design a person-centred care program for their own region. • A diverse cohort of primary care practices, Aboriginal medical services and other health services helped implement the program (broadly grouped by the PHN based on perceived level of change readiness or adaptive reserve). This cohort included private and public primary care providers and social and community-based services since the program involved social prescribing and care coordination across the healthcare neighbourhood.

Steps	Description
6. Deepen the impact and enable the viral spread of 'win more-win more' value creation	AGPAL and Brisbane South PHN recognised the impact of the co-creation process on the implementation of the person-centred care model of care and that the value creation extended to other stakeholders, programs and end users locally, regionally and nationally: • Other programs within Brisbane South PHN can now leverage off the educational resources and learnings of the program. • Subject matter experts involved in coaching and training delivery have personally gained value from each other's contributions and the coaching and implementation process. • End users, including the general practices and care providers across the healthcare neighbourhood who contributed to the development, delivery and use of the training, now have resources to enhance their service delivery and patient care. • The patients of the practices benefit from the person-cared care model and better coordinated service delivery. • Brisbane Southside region now has more health services, clinicians and stakeholders providing person-centred care, which is likely to improve service delivery and outcomes. • Other PHNs in Queensland and across Australia have already benefited from the program. For example, the Gold Coast PHN Primary Care Improvement Initiative is based on the 10 building blocks of high performing primary care and is contextualised by consultative platforms involving executive, clinical, operational, educational and end user representatives. Gold Coast PHN is consulting with Brisbane South PHN.

Table 4: Engagement platforms developed for co-creating the Brisbane South Person-centred Care education and training resources

Purpose	Stakeholders and partners	Platform for engagement	Outputs
Project initiation	• Partners: Brisbane South Primary Health Network (BSPHN) • Australian General Practice Accreditation Ltd. (AGPAL) • Health transformation subject matter experts (clinical and non-clinical) • Identified regional primary care leaders	Collaborative half-day, in-person workshop	A core curriculum scaffold contextualising the '10 building blocks of high performing primary care' and other key health transformation models for the BSPHN regional context
Ongoing stakeholder engagement	• Partners: BSPHN and AGPAL • Health transformation subject matter experts (clinical and non-clinical) • BSPHN Practice Support and Optimal Care program leads • Practice leaders and teams • Consumer representatives	Formal (information sharing and high level discussion) and informal (regular, flexible, operational) meetings across the life of the program	Buy-in and sustained stakeholder engagement across the life of the program, including activation of change enablers (practice support and PHN program teams) to support program implementation and sustainability
End user engagement and program recruitment	• Partners: BSPHN and AGPAL • Health transformation subject matter experts (clinical and non-clinical) • BSPHN Practice Support and Optimal Care program leads • BSPHN CEO and board members • BSPHN practice leaders and teams • Consumer representatives	Regional launch event including program presentation, speaker panel, dinner and networking opportunities	Program promotion – gained practice registrations (uptake) and increased awareness regionally
Co-creation of education and training resources	• BSPHN representatives including executive team, General Manager, person-centred care leads, clinical review team, and Optimal Care program leads • AGPAL representatives including General Manager, project management team, subject matter experts (writers and reviewers), instructional designers, copy editors, animators, graphic designers	Formal and informal spaces to consult about the content for inclusion and written feedback and input throughout the iterative content development and review process and stages: • Three iterations of content storyboard development (Alpha, Beta 1, Beta 2) • Online module build • Delivery of training • Evaluation and feedback • Implementation of learnings	Educational assets developed and deployed: • 10 eLearning modules • Tools and resources • Learning extension additional resource lists • Eight workshops • Six workbooks • 10 webinars

Purpose	Stakeholders and partners	Platform for engagement	Outputs
Evaluation to inform continuous quality improvement	• BSPHN representatives including executive team, General Manager, person-centred care leads, clinical review team, Optimal Care program leads	A multi-layered evaluation system including: • Partnership efficacy feedback (verbal, written, formal and informal)	Feedback from end-users and stakeholders and continuous quality improvements implemented across program design and delivery
	• AGPAL representatives including General Manager, project management team, subject matter experts (writers and reviewers), educational and instructional designers, copy editors, animators, graphic designers • End-user representatives including PHN staff (train-the-trainer audience), Practice Leaders and teams (Learner audience)	• Program development feedback (captured in the iterative review process) • Learner feedback (PHN train-the-trainer audience and practice leader audience (verbal, written, formal and informal)	
Program reporting and dissemination data	Partners: BSPHN and AGPAL	Written, formal project progress reports Formal and informal presentation about the program at PHN alliance meetings and other events	Co-authored program reports to inform the next phase of program design, capturing design, implementation, outcomes and learnings