Establishing a Perioperative Care of Older People Undergoing Surgery (POPS) Service in Elective General Surgery

Cardiff and Vale and Swansea Bay University Health Boards

Value Proposition:

Rising surgical demand among frail older adults has made the current preoperative model unsustainable, causing delays, complications, higher costs, and poorer outcomes. The POPS model embeds early comprehensive geriatric assessment (CGA) to optimise patients, support shared decision-making (with 1 in 7 opting out of surgery), and reduce system inefficiencies. Already used in Cardiff and Vale (CAV) and Swansea Bay (SB) University Health Boards, it aligns with national policy and could save around £5 million annually if rolled out Wales-wide. With over 6,000 frail patients awaiting surgery, now is the time to standardise care, reduce variation, and improve outcomes cost-effectively.

Why Change is Needed:

The surgical population is ageing, with 45% of anaesthetic procedures undertaken in patients over 65, many of whom are frail. These patients face a four times higher risk of complications (60% vs 15%), longer hospital stays and loss of independence, especially following emergency laparotomy.

In Wales, 6,314 frail patients await surgery; in Swansea Bay, 1 in 3 frail inpatients are surgical cases. One-stop POPS clinics, embedding early CGA, has been shown to save £803 per patient (Hall et. al. 2023) and reduce hospital stays by 4.5 days (McEvoy et al., 2015).

Though CGA cuts emergency laparotomy mortality from 22.3% to 13%, only 23% of eligible Welsh patients receive it. With 14% regretting surgery, improved preoperative assessment and shared decision-making are crucial. Urgent workforce upskilling and adaptable perioperative pathways are needed to improve outcomes, reduce complications and costs, and deliver more efficient, patient-centred care.

The Opportunity - POPS Model:

The POPS model uses CGA to shift surgical pathways from “waiting” to “preparation,” optimising health, function, and decision-making. It integrates medical, functional, and social assessments with shared decision-making, leading 1 in 7 patients to choose not to proceed with surgery, freeing up capacity.

Endorsed by the Centre for Perioperative Care (CPOC), POPS has been delivered in CAV and SB University Health Boards since 2020, led by consultant geriatricians supported by multidisciplinary teams. While local delivery can vary, consultant geriatrician involvement is essential. Frailty is identified via digital tools like Power BI and patient self-screening, supported by trained staff.

Impact and Outcomes:

Demonstrated benefits of POPS in CAV and SB University Health Boards include:

Clinical and Operational:

- 84% underwent shared decision making and optimisation in single clinic, reducing appointments and travel.
- 1 in 7 patients opted not to proceed with surgery.
- Medication rationalisation, improved safety and effectiveness.
- Improved access to social and third sector support.
- Strong positive patient feedback.
- Geriatrician input for 88% of National Emergency Laparotomy Audit (NELA) patients (up from 5%).
- Earlier discharge via pre-admission therapy referrals.
- Digital self-screening saves clinician time.
- 14% of high volume, low complexity patients removed from waiting lists.
- Reduced referrals to single-organ specialties, primary care, and anaesthetics.

Economic:

- £41 saved per patient via medication review.
- £120k–£350k saved annually from SDM-related surgery deferrals.

Breakdown of Costs and Return on Investment:

- **NHS Planned Care has secured initial funding for staff, equipment, and licensing across all health boards, and produced implementation plans.** *Long-term funding will need to be developed locally.*
- Capacity needs will differ by health board and may impact on the number of consultant sessions that need to be delivered.
- Salary estimates show in the table reflect the minimum required to establish a POPS service.

Description of Cost	Cost	Duration	Type
Staff salaries: 1 FTE Band 3 Admin / 1 FTE Band 6 CNS / JCF Approx. 3 Consultant sessions / week	£30,000 £50,00 £42,000	Recurrent	Revenue
IT - Laptop, Dictaphone:	£2,500	Non-recurrent	Capital
Digital systems - Promptly, Attend Anywhere	Approx £30,000	Recurrent	Capital (only required if not already licensed)
Total	**£154,500**		

Value-based economic modelling suggests that scaling this model across Wales could remove 884 patients from waiting lists with estimated savings of £3.3M in opportunity costs alone. Medication rationalisation would save >£258K whilst avoidance of additional primary and secondary care appointments could yield >£1.4M.

Metric	Projected Savings
Not proceeding	Opportunity cost £189K - £817K per University Health Board (UHB) per annum, total across Wales £3,357,128 per annum.
Medication savings	Annual recurring saving £41 per patient, £14637- £63181 per UHB, total across Wales £258,874 per annum.
Reduction in onward referrals*	Approximately £1,344,882 million per annum across Wales.

* To single-organ specialities, anaesthetics or back to primary care.

Strategic and Policy Alignment:

The service aligns with key national strategies, including:

- **CPOC and NELA:** Recommend CGA and geriatrician input for frail surgical patients.
- **A Healthier Wales**: Supports holistic, person-centred care.
- **NHS Wales Technical Planning Guidance (2025–28):** Aligns with care modernisation goals.
- **Promote, Prevent and prepare for Planned Care (2023):** Focuses on preparation over deconditioning.
- **Programme for Transforming and Modernising Planned Care (2022):** POPS improves flow and reduces backlogs.

Implementation Requirements and Available Support:

Phase	Key Milestones	Timeline
Phase 1: Engagement & Planning	Engage critical stakeholders; review existing and available resources and secure any additional resources. Identify pilot-ready sites. Complete a baseline questionnaire of current service provision. Develop process pathways and governance documentation for local context.	1-3 months
Phase 2: Workforce & Infrastructure	Recruit/ identify staff to provide the service. Provide staff training on model and protocols.	3-6 months
Phase 3: Pilot Rollout	Implement the model in new health board areas, supporting early monitoring and iterative improvements.	6-12 months

Phase 4: Evaluation & Long-Term Sustainability	Conduct full-service evaluation, measure patient outcomes, ROI and cost-effectiveness. Embed service into strategic planning and secure long-term funding.	12-18 months

Supporting resources include: Service model templates, workforce job descriptions, digital tool examples, implementation plans and short-term funds through NHS Planned Care.

Call to Action - Adopting the POPS Model:

With nearly half of all surgeries in Wales involving patients over 65, many living with frailty, the need to modernise perioperative care is urgent. The POPS model offers a proven, person-centred solution that reduces complications, shortens hospital stays, and saves approximately £803 per patient through streamlined care and shared decision-making. Yet currently, only 23% of eligible patients receive the nationally recommended CGA. Health boards across Wales are urged to support the wider adoption and spread of the POPS service, which is accompanied by financial support. By doing so, we can improve outcomes, reduce avoidable surgery, and better support the 6,000+ frail patients awaiting treatment. Investing in this model now will futureproof surgical care for our ageing population.

Project Contacts:

Dr. Nia Humphry, Consultant Perioperative Geriatrician & Dr. Margaret Coakley, Consultant Anaesthetist, CAVUHB: nia.humphry@wales.nhs.uk; margaret.coakley@wales.nhs.uk

Dr. Karina James, Consultant Geriatrician, SBUHB
karina.james@wales.nhs.uk

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