Quality Improvement Project

Blood requests for Special Care dentistry patients undergoing sedation or general anaesthetic:

Creating a clear and consistent process

Background

- Special care dentistry is a speciality in dentistry that provides oral healthcare to patients who find it difficult to receive routine dental care. This can be due to physical, intellectual, medical or social impairments

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Patients seen in special care dentistry often have complex needs, such as severe dental anxiety, learning disabilities or significant medical conditions and may require dental treatment under sedation or general anaesthetic.

Many patients are unable to have blood tests carried out in routine setting (GP surgeries/clinics) due to anxiety, behavioural challenges and as a result bloods can be arranged alongside the planned dental treatment.

More complex system involving multiple teams/systems and it was noted for errors in processing/collection, ordering bloods on EPIC and unclear pathway on who to route the results to.

Local review highlighted inconsistent encounter selection.

Bloods being ordered as outpatient and inpatient orders in EPIC, despite all patients being managed as day cases

Staff feedback indicated ongoing confusion on what the correct ordering pathway is and on occasions led to collection errors and processing errors and therefore no blood results.

Blood results were also being routed back to the ordering clinician (dentist) creating uncertainty on ownership of blood results

Variation in blood management within the department represents a latent patient safety risk and opportunity for process standardisation.

Standards and Guidelines

- The General Medical Council (GMC) & **General Dental Council (GDC)**: The fundamental medico-legal rule dictates that **the clinician who signs or requests the investigation holds ultimate accountability**. They must ensure the results are reviewed, interpreted, and acted upon.

- British Medical Association (BMA) **Guidance**: The BMA clearly states that the responsibility for reviewing a test result lies with the clinician who felt it was clinically necessary to request it. If an ordering system allows a "surrogate" or administrative clinician to request a blood test, a pre-agreed local policy must dictate who holds the duty of care.

Aim & Objectives

Aim:

To increase the percentage of correctly processed blood test requests for day case GA/Sedation patients from baseline to 75% within 3 months of implementation.

Objectives:

- ✓ Improve staff understanding of blood request process
- ✓ Standardise blood request documentation
- ✓ Improve accuracy of blood test ordering
- ✓ Clarify roles and responsibilities
- ✓ Improve overall process reliability

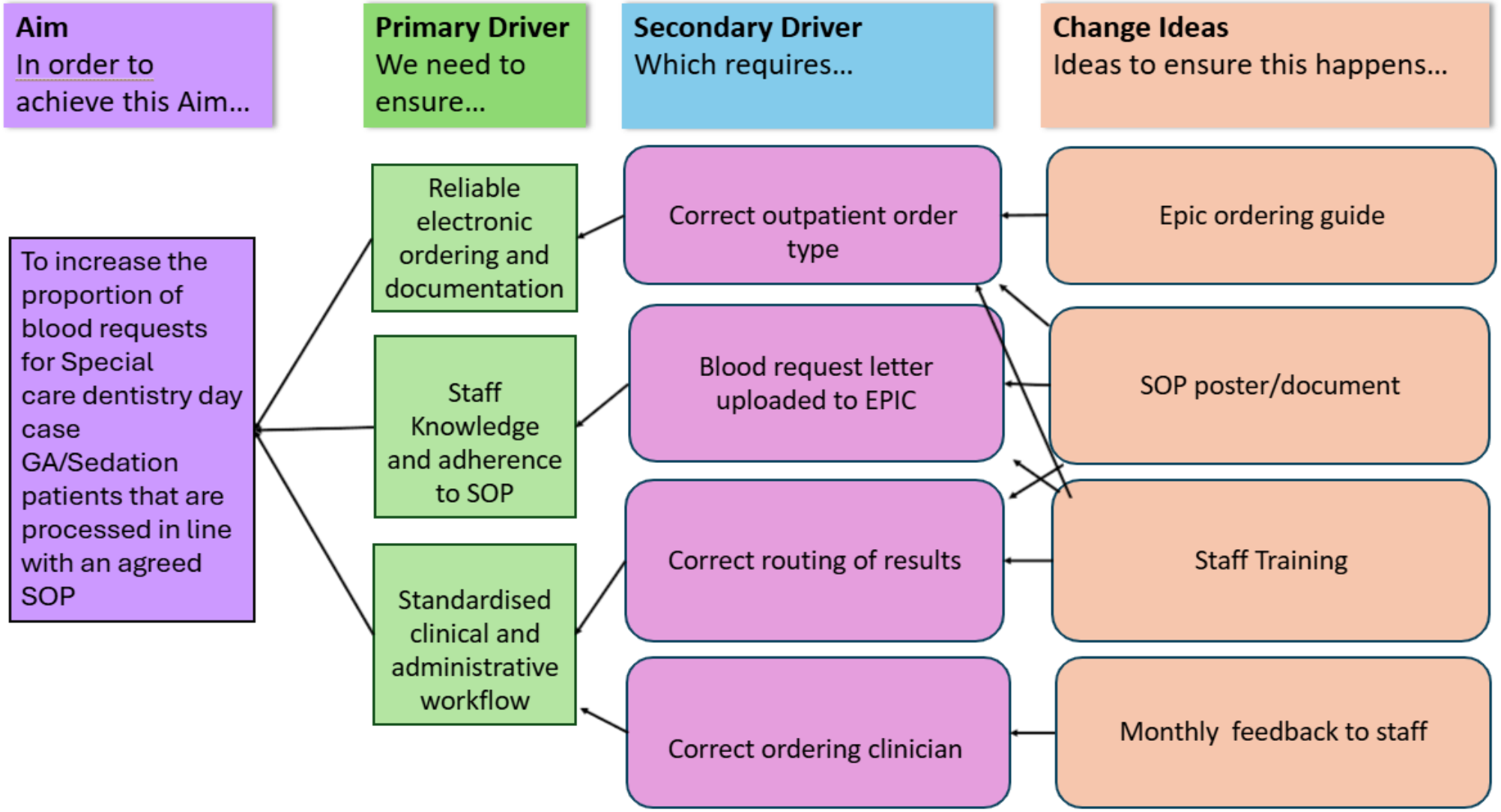
Measures and Definitions

- **Process measures:**
  - Staff understanding/confidence on the management of blood requests
  - % blood requests letters uploaded to EPIC / Clear documentation of request
  - % correct encounter type / blood order (Inpatient order)

- **Outcome measures:** % of blood test requests processed in line with the SOP (complying with each of the 4 elements)

- **Balance measures:** Administrative workload for the dental team

Driver Diagram



Methodology

Each blood test request was assessed against four key steps. A request was counted as fully complaint only if all steps were completed correctly.

1. Letter from requesting clinician for bloods uploaded to media on EPIC / Clear documentation in notes

2. No blood processing or collection errors

3. Order type correct (Inpatient order) - bloods ordered SCD on day of procedure

4. Bloods routed correctly back to the requesting clinician

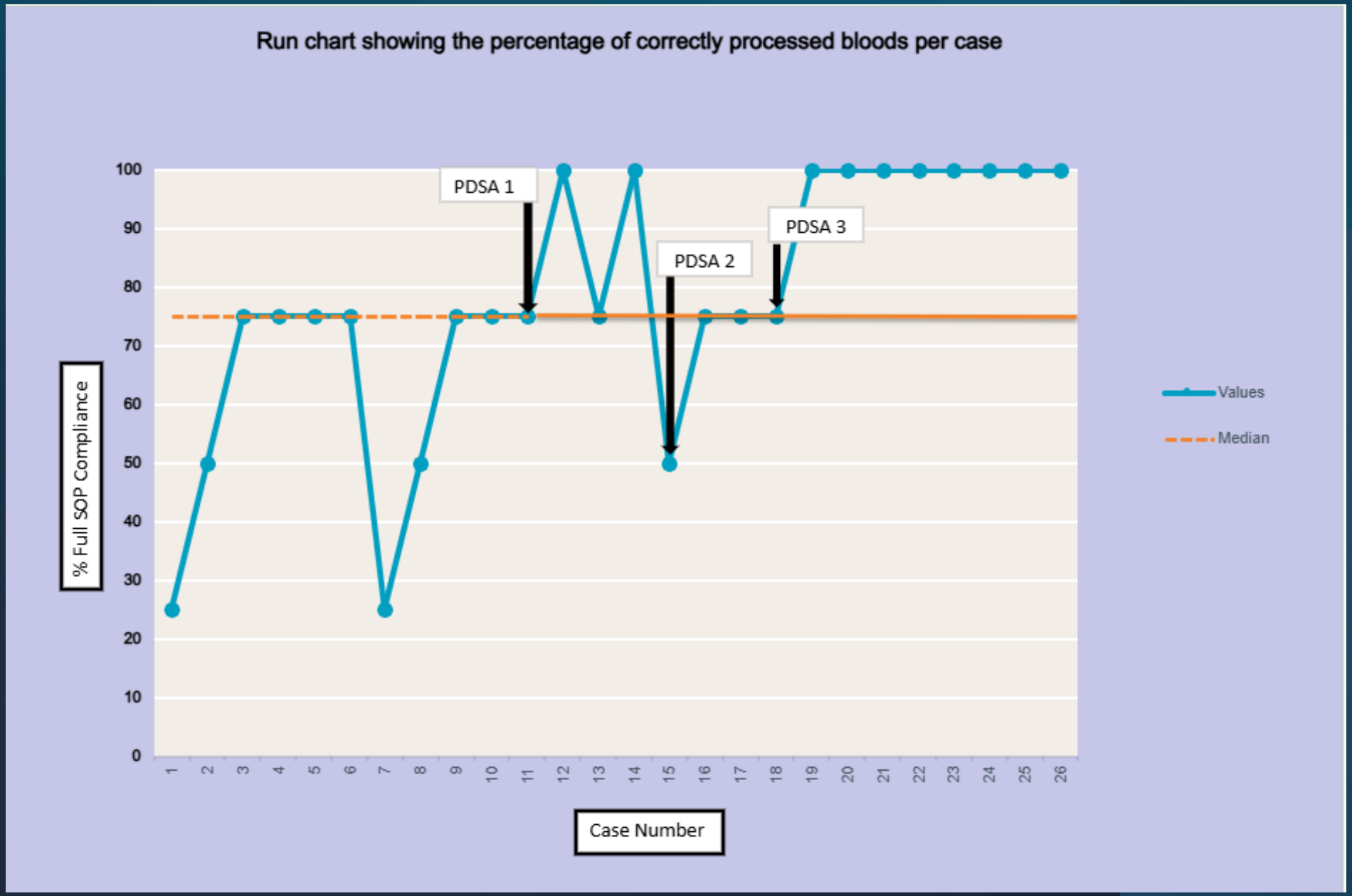
- Complying with each of the 4 elements of the SOP was denoted as 25% compliance for that case i.e. compliance with 1 element scored 25% and compliance with all 4-elements scored 100%".

Initial change Ideas

PDSA 1: Multidisciplinary Team meeting

PDSA 2: Creation of SOP Poster / Document

PDSA 3: Formal team demonstration on selecting correct encounter type and uploading documents to media on EPIC.


Run chart showing the percentage of correctly processed bloods per case
PDSA 1
PDSA 2
PDSA 3
% Full SOP Compliance
Case Number
Values
Median
100
90
80
70
60
50
40
30
20
10
0
1
2
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Results

Results

✓ Baseline median was 75% based on the first 11 cases before being frozen and extended with dashed line.

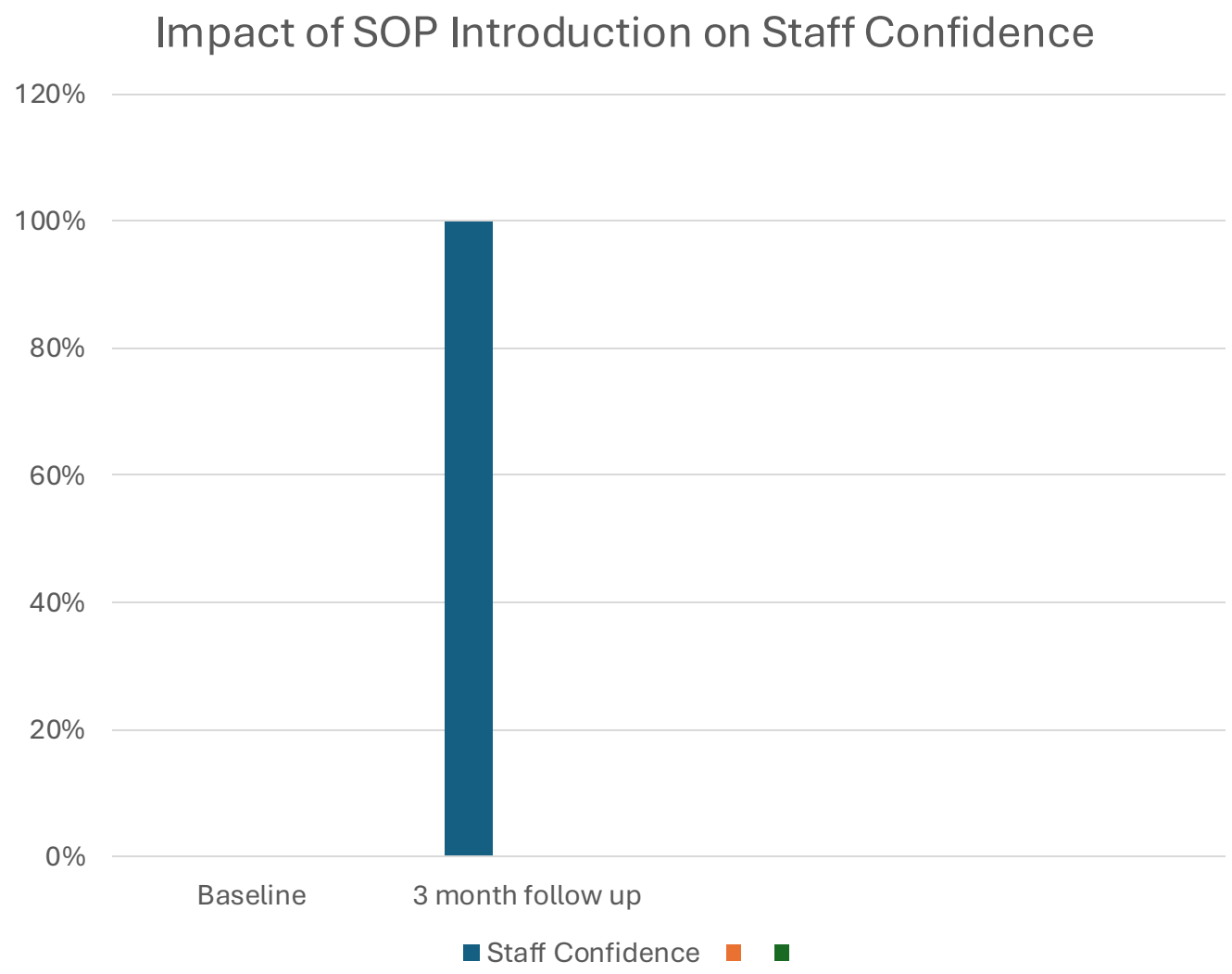
✓ Multiple cases reaching 75-100% compliance

- **Initial variation was due to:**
  - Incorrect order type – bloods being ordered as outpatient order instead of inpatient order.
  - +
- Missing documentation – letters from requesting clinician not being uploaded to media on EPIC and confusion due to difference in workflow when external clinician who have access to EPIC requests bloods

✓ Following implementation of PDSA cycles, overall compliance improved.

✓ Most recent data points (last 8 cases) show consistent high performance (100%)

✓ A shift of 8 consecutive points above the median was observed after PDSA 3 : Statistical meaningful improvement in process reliability



Baseline questionnaire demonstrated 0% staff confidence in the process, improving to 100% at 3 months post intervention

Next Steps

- Further staff training
- Standardisation of the process across all clinicians
- Work alongside GP who has special interests in physical health of adults with intellectual disability for next phase of QI.

Conclusion

- This Project demonstrated progressive improvement in the management of bloods request within the Special care dentistry department, with compliance increasing over time following implementation of a standardised process.

- The findings highlight the importance of clear communication, defined workflows and consistent documentation in complex care pathways.

- Standardising the process had reduced the risk of missed or delayed results, improved timeliness of blood testing and contributed to enhanced patient safety and service efficiency.