Improving Surgical Handover Documentation and Efficiency through a Microsoft Teams-based Handover Sheet

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Background

I chose this topic to carry out a QIP on the surgical handover lists as we faced a series of problems with the current handover sheet for General Surgery ward rounds:

1. *The account is locked for one person at a time to edit therefore increasing time spent waiting*
2. *Formatting the Word document can be difficult to read and edit*
3. *We would like to add more information onto the handover which is limited to a Word document*
4. *Anyone who has access to the SWFT\Wards can access General Surgery and Urology patient information*

Aim

1. *Ward round handovers with clear and up-to-date information*
2. *For staff's time spent updating lists to reduce and allow more time spent on direct patient care*
3. *For safer control of patient information*

Method

- *Problem identification: Staff highlighted issues with the Word-based handover list — limited access (only one person could edit at a time), difficult formatting, poor readability, and lack of space for key information.*
- *Baseline measurement: Collected data on inclusion of relevant information (presenting complaint, imaging, antibiotics, procedures, comorbidities, referrals) and staff-reported time spent editing.*
- *Intervention (PDSA Cycles):*
- *Cycle 1: Introduced Excel handover on Microsoft Teams to allow synchronous editing and improve accessibility.*
- *Cycle 2: Reformatted sheet with structured sections and tick-box prompts for antibiotics, referrals, and comorbidities.*
- *Data collection: Surveys of staff handovers after each cycle to assess documentation quality, relevance, and time spent.*
- *Measures: Process (documentation completeness), outcome (handover quality, staff efficiency), balancing (time spent, usability).*

Conclusion

The Excel-based handover sheet improved completeness of handovers from 54.5% to 85.7%, with better documentation of antibiotics, procedures, and comorbidities. Synchronous access eliminated delays, and time spent updating fell by 9%. Overall, the project enhanced communication, efficiency, and patient safety.

PDSA Cycles 1 and 2

Act

Identify areas where formatting and prompts could be improved to make the sheet clearer and encourage documentation of antibiotics, referrals, and comorbidities

Plan

1. *Excel sheet on Teams*
   a. *An excel doc per month*
   b. *New sheet made each day*
   c. *To include all patients on wards and take*
2. *New added elements*
   a. *?NELA*
   b. *The admission date*
3. *No longer use ward lists on \swft wards file*

Study

Time spent updating the handover and completeness of documentation was measured by surveying staff

Do

Staff began using the new shared Excel sheet, allowing synchronous editing for all team members

Act

Reinforce use of the optimized sheet and consider further iterative refinements or broader implementation

Plan

Refine the Excel handover sheet to improve clarity and completeness

Study

Staff continued to use the revised sheet, and data showed reduced time spent updating the handover and improved documentation completeness

Do

Add structured boxes and prompts for key elements such as antibiotics, referrals, comorbidities, and other relevant patient information

Baseline handover

Cons	Name DOB PID	Age DDx		WBC	Hb	Neut	CRP	Na	K	Ur	Cr	Alb	Bili	ALP	ALT

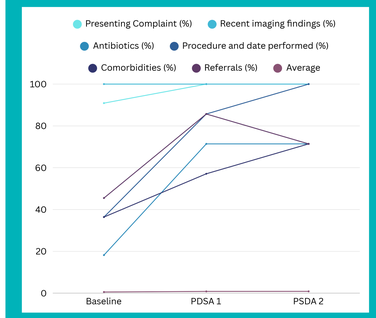
PDSA 1 handover

Cons	A1	JC - 12345 82F Ischaemic Colitits	?NELA		WBC	Hb	Neut	CRP	Na	K	Urea	Creat	Alb	Bili	ALP	ALT	Scans	Jobs
				2-Apr														

PDSA 2 handover

Cons	Ward/Be																		
Singh	Ward Bed	Age Sex Diagnosis	Name PID DOB																
			Admission date		WBC	Hb	Neut	CRP	Na	K	Urea	Creat	Alb	Bili	ALP	ALT	Mag	Phos	Jobs
			Abx																
			Abx Review date																
			NELA																
			COTE																
			Scans																

Study



Results

- *Relevant information on the handover sheet improved from 54.5% at baseline to 83.3% after Cycle 1 and 85.7% after Cycle 2 (+57.1% overall). Antibiotic documentation rose from 18.2% to 71.4%, procedure details from 36.4% to 100%, and comorbidities from 36.4% to 71.4%. Referrals increased from 45.5% to 85.7% in Cycle 1, then dipped to 71.4% in Cycle 2, likely reflecting patient variation and introduction of a COTE-specific box. Presenting complaint and imaging remained consistently high (≥90%).*
- *Average time spent updating the sheet changed little: 32.2 minutes at baseline, 33.9 minutes in Cycle 1 (+5%), and 29.3 minutes in Cycle 2 (−9% overall). The three-minute reduction may not be clinically meaningful, and results are limited by self-reported times.*
- *A major gain was access: at baseline, 18.2% of staff waited daily, 45.5% several times a week, and 27.3% weekly for list access. With Teams, all staff could edit synchronously, eliminating delays and freeing more time for patient care.*

Discussion

This project was built upon an already functional process rather than in response to error or harm. Staff were actively engaged throughout, completing surveys that contributed both quantitative and qualitative insights. This fostered a collaborative environment, strengthened team relationships, and encouraged innovation rather than compliance.

By moving the handover sheet to a shared Excel document, the project demonstrated how small, positive changes can enhance efficiency, eliminate frustrations, and free up more time for direct patient care. In doing so, it not only improved workflow but also supported staff morale and resilience.