




Hip fracture innovation in short stay surgical ward – Leading the future of care

<p>What is Stupid? Why is it Stupid?</p>	<p>What was Implemented?</p>						
<p>Hip fracture cases are admitted to the inpatient ward similarly to other cases and are required to wait for inpatient bed availability in the ED.</p> <p>Resulting in...</p> <ul style="list-style-type: none"> Delays in hip fracture surgery with 42% of patients not receiving operative intervention within the recommended MOH guideline 48 hours 	<p style="text-align: center;">By streamlining the hip fracture admission and redesigning pre-operative pathway that supports early optimisation, this results in reduced surgical delays and patients' length of stay.</p> <table border="0" style="width: 100%; background-color: #ffffcc;"> <tr> <td style="width: 50%; text-align: center;">Before</td> <td style="width: 10%; text-align: center;"></td> <td style="width: 40%; text-align: center;">Now</td> </tr> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> 58% of hip fracture patients underwent surgery within 48 hours Average length of stay : 8.9 days </td> <td></td> <td style="vertical-align: top;"> <p>Collaboration between ED NIC, BMU, and B3 NIC supports rapid ward admission to short-stay surgical ward (B3) instead of making patients wait for inpatient beds:</p> <ul style="list-style-type: none"> Early patient identification in the Emergency Department, prioritised bed allocation Improved multidisciplinary coordination enhanced patient flow and operational efficiency. Standardised pre-operative processes supporting timely investigations, surgical readiness, and theatre access. </td> </tr> </table> <p>Impact</p> <ul style="list-style-type: none"> Compliance with surgery within 48 hours improved from 58% to 76%. Average length of stay for hip fracture patients reduced from 8.9 days to 7.6 days Estimated total cost saved = ~\$11,011 over 9 months (based on an average of 13–14 hip fracture cases per month). High potential to scale across NUHS, WIP to discuss with Orthopaedic Ops Anticipated longer-term benefits include reduced bed pressure, improved surgical access, and strengthened value-based care delivery. 	Before		Now	<ul style="list-style-type: none"> 58% of hip fracture patients underwent surgery within 48 hours Average length of stay : 8.9 days 		<p>Collaboration between ED NIC, BMU, and B3 NIC supports rapid ward admission to short-stay surgical ward (B3) instead of making patients wait for inpatient beds:</p> <ul style="list-style-type: none"> Early patient identification in the Emergency Department, prioritised bed allocation Improved multidisciplinary coordination enhanced patient flow and operational efficiency. Standardised pre-operative processes supporting timely investigations, surgical readiness, and theatre access.
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#1010

NTFGH Ward B3, Orthopaedic Surgery, Anaesthesia, Emergency Department, Bed Management Unit

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By admitting hip fracture cases directly to B3 short stay surgical ward instead of making patients wait for inpatient beds, this results in reduced surgical delays and patients' length of stay.


- Reduction in average length of stay for hip fracture case: from 8.9 to 7.6 days, resulting in ~\$11,011 cost avoidance
- Improved 48-hour surgery compliance : from 58% to 76%



(Left to right) Adj Asst Prof Amritpal Singh, Orthopaedic Surgery, Dr Cheng Yiling, Anaesthesia, SSN Muhammad Syafiq Bin Mohamed, Ambulatory Unit (AMU), Ms Jamie Han, Bed Management Uni (BMU)

Not in picture: Dr Tay Wei Ling, Emergency Department, ANC Fahnafisah Mohamed, Emergency Department, Ms Zhu Huixing, Orthopaedic Surgery

Streamlining and Digitalising PTW Submission and Review/Approval Process

What is Stupid? Why is it Stupid?	What was Implemented?
<p>Manual & Laborious: I chase 5 people to approve my request EVERY time. WhatsApp. Call. Walk. Miss one person — start over.</p> <p>Zero Status Visibility: No idea where my request is. Submitted 3 days ago. Approved? Rejected? Lost? So I chase again.</p> <p>Paper Waste: PTW generates 12,500 sheets annually. Need to buy more filing cabinets.</p> <p>Safety Risks: No visibility if vendors do declared work. Only find out after incidents.</p> <p>Stupidest: Operating in 2025 but still using 1980 process — clipboard in hand, chasing people down corridors</p>	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <h3 style="text-align: center;">Before (Problems)</h3> <ol style="list-style-type: none"> Manual Approval Chase: Physically chase 5 approvers with no set order. High WSH rejection risk. Full Manual Review: Every PTW requires full WSH sign-off regardless of risk. Low-risk activities consume same effort as high-risk No Progress Visibility: No PTW status tracking. Staff resort to repeated calls/WhatsApp 100% Paper Submissions: All PTWs physical forms with printed attachments. Safety Blind Spots: No vendor tracking, audit trail, or compliance oversight </div> <div style="width: 10%; text-align: center;"> <p>Streamlining</p>  <p>Digitalising</p> </div> <div style="width: 45%;"> <h3 style="text-align: center;">Now (Solution)</h3> <ol style="list-style-type: none"> Reduced # of Approvers from 5 to 3 with sequential online approval flow via Power Automate <ul style="list-style-type: none"> Prior checks from vendor and requestor reduce rejections from WSH. Vendor Starter Kit provided. PTW validity extension from 2 weekly cycle up to 4 weeks Smart 3-TYPE PTW Triage: PTWs categorised by risk with low-risk exemptions auto-approved. 30% auto-approved exemptions, 10% clearance review, 20% streamlined renewal, 40% maintenance route (yearly approval) Live SharePoint Dashboard: Centralised real-time status visibility with auto-reminders 100% Digital via FormSG submission where records are auto-archived to SharePoint Full Oversight: Digital audit trail for all active vendor works across JHC </div> </div>
<h3>Impact</h3> <ul style="list-style-type: none"> Paper saved annually: 12,500 pages (= 5 submissions/day × 10 pages × 250 days) 39.5% reduction in turnaround time: from 10.75 to median of 6.5 days per PTW submission Time saved annually replacing full manual review with Smart triage: 25,359 man-hours Additional savings of estimated 6,450 man-hours annually from launching of maintenance workflow to perform Risk Assessment Enhanced Safety & Compliance: Full digital audit trail + real-time vendor tracking WIP to share success story across NUHS - NUH, NUP, TGCH, 138 and AH to onboard on the same system 	

#1070 NUHS GCIFO, GS, WSH, QII, GITO

Streamlining and Digitalising PTW Submission and Review/Approval Process

The manual, paper-based PTW approval process was replaced with:

1. **Cross dept collaboration** (GCIFO, GS, WSH, QII, GITO) with voices and suggestions from ground up in formulating the solution.
2. Cost: **Zero cost incurred** as core team developed the automation leveraging on existing tools
3. **Streamlined digital system** featuring sequential online approval flow with reduced approvers from 5 to 3
4. Smart risk-based **triage for auto-approvals**
5. **Live SharePoint dashboard** for real-time tracking, On the go systems
6. **100% digital submissions** via FormSG with automated archiving.
 - Paper saved annually: **12,500 pages**
 - **39.5% reduction** in turnaround time: from 10.75 to median of 6.5 days per PTW submission
 - **Time saved annually** replacing full manual review with Smart triage: 31,809 man-hours
 - **Faster TAT approval** (from 10 days to 6 days)



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NUHS Get Rid of “Stupid” Stuff Success Story