Pharmacy stock replenishment to wards

Process Definition Document (PDD): template and worked example

Example company (fictional): Klinikum Südheide, a regional hospital in Lüneburg, Germany (420 beds, 18 wards) and its hospital pharmacy.

Document control

Field	Value
Process name	Pharmacy stock replenishment to wards
Process owner	[Name, role]
Prepared by	[Name]
Reviewed by	[Names of the people who do the work]
Approved by	[Name, date]
Version	1.0 (as-is)
Status	Draft

How to use this template

This is a complete process definition document (PDD) for hospital pharmacy stock replenishment, also called ward stock supply, medicines replenishment or the pharmacy order-to-delivery process. It describes how the pharmacy keeps medicines available on the wards: from the ward cabinet count to the top-up delivery, and from the wholesaler order to goods receipt and invoice matching. The company is fictional, but the roles, systems and rules are those of a typical regional hospital.

Use it as a starting point. Replace the hospital details, keep the sections, and walk through each step with the nurses, technicians and purchasers who do the work. Most pharmacies change the approval limit, the order cut-off time and the way shortages are tracked. Prescribing, patient-level decisions, narcotics ordering and sterile compounding need their own documents.

- Replace the hospital, the ERP and the ward ordering tool with yours. If wards still order on paper, add the retyping step before step 2.
- Set your own approval limit in step 10. The 5,000 EUR threshold and the cut-off time are what most often differ between hospitals.
- Decide where shortages live. One list in the ERP is easier to follow than a mix of a spreadsheet and the system.
- Check the percentages with real data. A month of requests and deliveries usually shows how many orders are split, substituted or quarantined.
- Add your narcotics and compounding flows as separate documents if the pharmacy runs them.
- Keep the as-is version after you redesign the process. It is your baseline for measuring the change.

1. Purpose and scope

This procedure describes how the hospital pharmacy of Klinikum Südheide keeps medicines stock available on its wards, from the moment a ward stock level reaches its reorder point or pharmacy stock falls below the minimum, to the moment goods are booked into the ward cabinet and the wholesaler invoice is matched. It gives the wards, the pharmacy and accounts payable one shared description of who does what, so that wards do not run out, expired stock stays low and every delivery is traceable.

In scope

- Weekly ward cabinet counts and top-up requests
- Approval of non-standard items
- Picking and delivery of ward orders
- Purchase orders to the wholesaler, including substitutions and shortages
- Goods receipt with batch, expiry and cold-chain checks
- Invoice matching and payment

Out of scope

- Prescribing and patient-level decisions
- Narcotics ordering
- Sterile compounding

2. Process at a glance

Item	Description
Trigger	A ward stock level reaches its reorder point, or pharmacy stock falls below the minimum.
Starts when	The Ward Nurse counts the ward cabinet against the stock list.
Ends when	Goods are booked into the ward cabinet, the wholesaler invoice is matched and SAP pays it in the next payment run.
Inputs	Ward stock list, Ward counts, Reorder-point report, Wholesaler confirmation and delivery note, Wholesaler invoice
Outputs	Ward top-up delivery, Purchase orders, Goods receipt with batch and expiry, Matched and paid invoice
Volume	About 11,500 purchase order lines and 9,200 ward top-up requests a year
Working hours	Monday to Friday 07:00 to 16:30, with an on-call pharmacist outside these hours. Wholesaler orders placed before 14:00 arrive the next morning.

3. Roles and responsibilities

Role	Responsibilities
Ward Nurse	The stock responsible nurse counts the ward cabinet, submits top-up requests, checks incoming boxes against the delivery note and shelves the items.
Pharmacy Technician	Picks ward orders, books transfers to ward stock, receives wholesaler deliveries, records discrepancies and puts goods away.
Pharmacy Purchaser	Runs the reorder-point report, creates and sends purchase orders, resolves supply gaps and obtains credit notes or corrected prices.
Responsible Pharmacist	Approves non-standard items, large orders and substitutions and decides on the release or return of quarantined goods.
Accounts Payable Clerk	Matches the order, the goods receipt and the invoice in SAP and returns invoices that differ.
Wholesaler (external)	Confirms orders, delivers the next morning with a paper delivery note and sends the invoice.

4. Systems

- SAP S/4HANA: purchasing, goods receipt and invoice verification
- SAP Fiori ward ordering module
- Wholesaler web portal and EDI channel
- Excel: tracker for supply shortages

- Shared pharmacy purchasing mailbox

5. Process map

Process diagram goes here

Draw one lane per role from section 3, the steps from section 6 in order, and a diamond for each decision in section 7.

6. Procedure, step by step

#	Step	Who	What happens	System	Output
1	Count the ward cabinet	Ward Nurse	Counts the ward cabinet against the stock list every week. This takes 10 to 15 minutes.	Paper stock list	Counted stock
2	Submit the top-up request	Ward Nurse	Enters the counts in the ward module, which proposes top-up quantities. The nurse adjusts and submits. This takes about 5 minutes.	SAP Fiori ward module	Top-up request
3	Approve non-standard items	Responsible Pharmacist	A request with an item outside the ward's standard list (about 8% of requests) goes to the pharmacist, who approves or rejects within about 2 hours. If rejected, the nurse corrects and resubmits (about 3% of requests). Other requests go straight to the picking queue.	SAP	Approved request, or rejection
4	Print lists and pick	Pharmacy Technician	Prints picking lists at 08:00 and 13:00 and picks the items. This takes 20 to 40 minutes per ward, after a wait of 2 to 4 hours from request to picking.	SAP	Picked ward order
5	Flag shortfalls	Pharmacy Technician	If pharmacy stock is below the requested quantity (about 12% of orders), picks what exists and flags the shortfall in SAP. Otherwise the full quantity is picked.	SAP	Partial order and flagged shortfall, or full order
6	Book the transfer and pack	Pharmacy Technician	Books the transfer to ward stock in SAP and packs sealed boxes.	SAP	Booked transfer, sealed boxes
7	Check and shelve the delivery	Ward Nurse	The delivery service brings the boxes. The nurse checks them against the delivery note and shelves the items. This takes about 10 minutes.	Delivery note	Ward cabinet restocked
8	Run the reorder-point report	Pharmacy Purchaser	Every morning, runs the SAP reorder-point report. This takes about 10 minutes.	SAP	List of items to order
9	Create purchase orders	Pharmacy Purchaser	Adds the flagged shortfalls and creates purchase orders in SAP. Each order takes 3 to 5 minutes.	SAP	Purchase orders
10	Approve large orders	Responsible Pharmacist	An order above 5,000 EUR (about 15% of orders) needs the pharmacist's approval in SAP. Approval takes up to 3 hours and often causes a missed 14:00 cut-off. Other orders	SAP	Approved order

#	Step	Who	What happens	System	Output
			are released by the purchaser.		
11	Send the order	Pharmacy Purchaser	Sends the order to the wholesaler by EDI or through the portal.	EDI, wholesaler portal	Order sent
12	Confirm the order	Wholesaler	Confirms the order. If lines are unavailable (about 10% of orders), the purchaser seeks an alternative. Otherwise the order is tracked.	EDI, wholesaler portal	Order confirmation, or unavailable lines
13	Approve a substitution	Responsible Pharmacist	Approves a substitute item by email, sometimes only the next day. The purchaser then adds a new order line.	Email, SAP	Approved substitution, new order line
14	Deliver the goods	Wholesaler	Delivers the next morning with a paper delivery note. The order to delivery time is about 18 hours.	Paper delivery note	Delivery at the pharmacy
15	Check the delivery	Pharmacy Technician	Checks the delivery against the SAP order: item, quantity, batch, expiry and, for cold-chain items, the temperature log. This takes 15 to 25 minutes.	SAP	Checked delivery
16	Post or quarantine	Pharmacy Technician	If a discrepancy or damage is found (about 6% of deliveries), records it, informs the purchaser and moves the item to quarantine. Otherwise posts the goods receipt.	SAP	Goods receipt, or quarantined item
17	Resolve quarantined items	Pharmacy Purchaser	Arranges credit or re-delivery with the wholesaler. The pharmacist decides on release or return of the quarantined items.	Email, phone	Credit, re-delivery, release or return
18	Put goods away	Pharmacy Technician	Puts goods away. Cold-chain items go into the fridge within 30 minutes.	SAP	Stored goods
19	Run the three-way match	Accounts Payable Clerk	Matches order, goods receipt and invoice in SAP. This takes 5 to 8 minutes, typically 3 to 10 days after goods receipt.	SAP	Match result
20	Return invoices that differ	Accounts Payable Clerk	If price or quantity differs by more than 2% (about 9% of invoices), returns the invoice to the purchaser. Otherwise the invoice is released.	SAP, email	Released invoice, or returned invoice
21	Correct the price or get a credit note	Pharmacy Purchaser	Corrects the price in SAP or obtains a credit note from the wholesaler.	Email, SAP	Corrected order or credit note
22	Re-match and pay	Accounts Payable Clerk	Re-matches the corrected invoice. SAP pays it in the next payment run and the case closes.	SAP	Paid invoice, closed case

7. Decision points and business rules

- Is the item on the ward's standard list? No (about 8% of requests): the pharmacist approves it first (step 3).
- Does the pharmacist approve the request? No (about 3% of requests): the nurse corrects and resubmits (step 3).
- Is pharmacy stock enough for the request? No (about 12% of orders): pick what exists and flag the shortfall (step 5).
- Does the order exceed 5,000 EUR? Yes (about 15% of orders): the pharmacist must approve it in SAP (step 10).
- Are all lines available at the wholesaler? No (about 10% of orders): find an alternative, which the pharmacist approves (steps 12 and 13).
- Is there a discrepancy or damage at receipt? Yes (about 6% of deliveries): record it and quarantine the item (step 16).
- Does the invoice differ from order and receipt by more than 2%? Yes (about 9% of invoices): return it to the purchaser (step 20).

8. Exceptions

- Wholesaler out of stock for several days (about 4% of items): the purchaser logs the item in the Excel tracker and phones a second wholesaler.
- Urgent ward request outside picking times (about 5%): the on-call staff pick immediately and book in SAP afterwards.
- Expiry within 90 days at receipt (about 2% of deliveries): the delivery is refused.
- Batch recall (a few per year): the pharmacist blocks the batch in SAP and the technicians clear the wards.

9. Controls

- Orders above 5,000 EUR need pharmacist approval in SAP.
- The creator of a purchase order cannot post the goods receipt or release the invoice (segregation of duties).
- Batch and expiry are recorded at receipt for traceability under GDP principles.
- Cold-chain deliveries need a checked temperature log before put-away.
- Ward stock is reconciled with SAP twice a year.
- Non-standard items and substitutions need the pharmacist's approval.

10. Known issues today

- Nurses count on paper first and then retype, which causes wrong quantities.
- Pharmacist approvals queue up in the morning and delay the 14:00 cut-off.
- Shortfalls sit partly in Excel and partly in SAP, so there is no single list.
- Small invoice differences go back and forth for days.
- Technicians retype batch numbers from paper delivery notes.

11. RACI matrix

R = responsible (does the work), A = accountable (owns the outcome), C = consulted, I = informed.

Activity	Ward Nurse	Technician	Purchaser	Pharmacist	AP Clerk
Count and request top-up	A/R	I		C	
Pick and deliver ward orders	I	A/R	I		
Run reorder report and create orders		C	A/R	I	
Approve large orders and substitutions			R	A	
Receive and check deliveries		R	I	A	
Handle quarantined goods		R	R	A	
Match invoices		C	C		A/R
Resolve price differences			R		A

12. KPIs

KPI	Definition	Target
Wholesaler line fill rate	Share of ordered lines delivered complete. The target is 97%.	[set]
Ward request lead time	Working hours from a ward submitting a request to the delivery arriving on the ward. The target is under 6 working hours.	[set]
Orders sent before 14:00	Share of purchase orders sent before the wholesaler cut-off, so that they arrive the next morning.	[set]
Days from goods receipt to	Average days between posting the goods receipt and releasing the invoice	[set]

KPI	Definition	Target
payment release	for payment.	
Expired stock written off	Value in EUR of medicines written off because they passed their expiry date, per year.	[set]

13. Revision history

Version	Date	Author	Change
1.0	[date]	[name]	First as-is version

Free template from processfix.ai. You may copy and adapt it. The company in the example is fictional.