Re-Engineering SACT Delivery: A Multi-Faceted Model for Enhancing Day Ward Capacity and KPIs

Eoin Tabb, BPharm, MPharm, MSc, MPSI, mBOPA | Chief 2 Pharmacist (Clinical Cancer Services) | University Hospital Waterford, Ireland

Background

Surging Clinical Demand: Rapid expansion of systemic anti-cancer therapies (SACT) saturated physical day ward chair infrastructure.

Aseptic Unit Congestion: Rigid morning and afternoon scheduling generated acute compounding spikes in the central cleanroom.

Product Discard Risks: Clinical deferrals caused irreversible wastage of pre-compounded intravenous doses.

Critical KPI Degradation: Ready-to-treat compliance (starting SACT within 15 working days) fell to a baseline of **46%**.

Objective(s)

Homecare Diversion: Transition stable maintenance cohorts (HyQvia) to community self-administration.

On-Site Verification: Embed clinical pharmacy validation directly into oncology day ward operations.

Dedicated FAST Chairs: Establish 30–60 min scheduling slots for rapid subcutaneous (SC) / Immunotherapy (IO) administrations.

Dosing Intervals: Standardize extended-interval IO titration (Pembrolizumab q6w, Nivolumab q4w).

Methods

Day Ward Pharmacy Hub: Deployed real-time National Cancer Information System (NCIS) clinical verification on-site.

Point-of-Care CSTD (Closed System Transfer Device) Reconstitution: Trained nurses to reconstitute SC therapies (e.g. Azacitidine) at bedside via CSTDs.

FAST Chair Allocation: Converted 2 chairs to strict turnaround blocks for mono-immunotherapy & SC agents.

Community Partnership: Enrolled non-SACT maintenance patients with TCP Home Care for community delivery.

Time	Hub / Location	Regimen Details	NCIS Status	Pharmacy
10:00	FAST Chair 1	Pembrolizumab 200mg	Verified	Advance Sent
10:30	FAST Chair 2	Azacitidine SC (CSTD)	Verified	Bedside Prep
11:00	Main Hub 01	R-CHOP 21-Day (Complex IV)	Verified	Cleanroom Hub



Figure 1. OPD2 HODW Workflow: Decoupling rapid SC & IO infusions from multi-hour infusional chemotherapies eliminated queue congestion and zeroed pre-prepared dose wastage.

Discussion

This multi-pronged model is directly reproducible across acute cancer units. Nursing empowerment through CSTD training and pharmacist integration proved pivotal to overcoming physical infrastructure bottlenecks.

Results / Conclusion

46% → 84%
READY-TO-TREAT KPI SURGED

4 → 14 / day
FAST CHAIR THROUGHPUT

22 pts / mo
DIVERTED TO HOMECARE

Zero Waste
DEFERRAL DISCARDS AVOIDED

- **Exceeded Target:** 15-day compliance surpassed the 75% national standard.
- **Aseptic Resilience:** Central compounding queue unburdened to focus on complex, high-risk systemic chemotherapy regimens.

References

Reference: 1. HSE SACT Aseptic Resilience Framework. Dublin; 2025.

Disclosure

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