



# National Central Fill Pharmacy (NCFP One)

1<sup>st</sup> highly integrated Outsourced Prescription Fulfilment service for Medication Delivery

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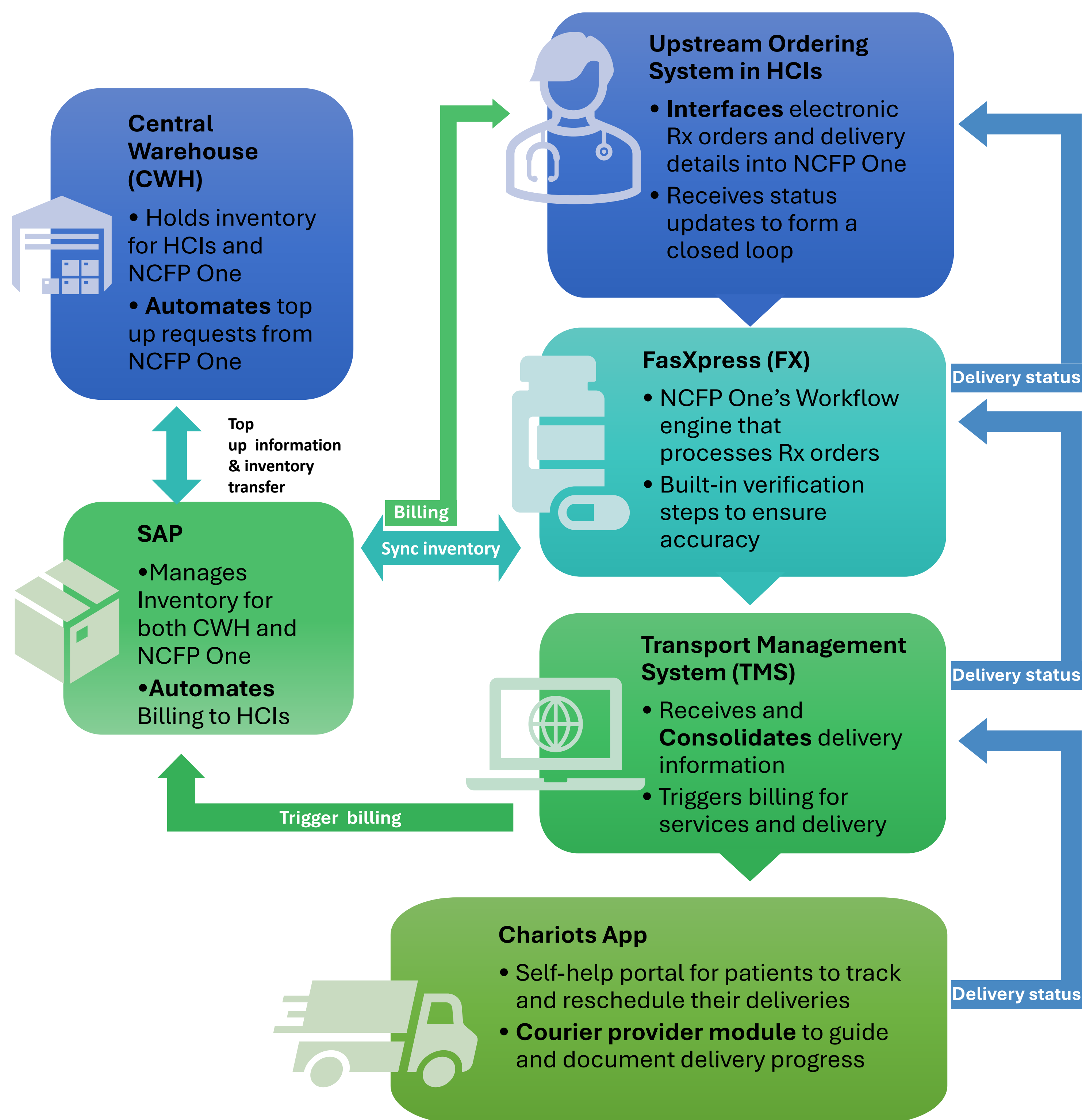
## NCFP One?

1. A one-stop prescription (Rx) fulfilment service managed by ALPS that centralizes pick, pack and delivery of Rx orders, coupled with last-mile delivery support structure
2. A versatile end-to-end closed loop digital solution with healthcare institutions (HCIs), enabling seamless receiving and processing of Rx orders, supporting timely and accurate delivery
3. Forms an eco-system with ALPS Central Warehouse that reaps economies of scale for medical supplies, standardization of processes and resource optimization

## How does NCFP One contribute to the national healthcare landscape?

1. Offload routine work in current Medication Delivery services from HCIs which are:
  - Sub-optimal in processes
  - Imposing a huge strain on the existing resources (space and manpower)
2. Presents a new model of care whereby HCIs may focus on:
  - Patient experience by reducing patient wait time in HCI Pharmacies
  - Medication review, counselling and adherence
  - Telehealth Services
3. Allows redesign of medication collection models to support the National Pharmacy Strategy to deliver medications to where and when patients need them

## Methodology (End-to-End Closed loop Digital Solution)



## FX for Accuracy

**Restocking**  
- Verification against commercial barcode or SIN number of drug

**Picking**  
- Verification scan with correct batch barcode to generate drug label

**Dispensing**  
- Scanning of drug label against commercial barcode or SIN number of drug  
- Image of drug for visual verification

**Handover to Courier**  
- Accounting of parcels by scanning unique barcode on delivery label

**Packaging**  
- Delivery label with unique barcode generated after each dispensing to prevent mislabeling  
- 2 delivery labels automatically generated for cold-chain

## TMS

**Delivery Order**  
- Consolidates multiple Rx orders into a single delivery order based on define algorithm  
- Automates billing once delivery is successful

**Delivery Status**  
- Receives delivery statuses  
- Sends updates to respective systems

## Chariots

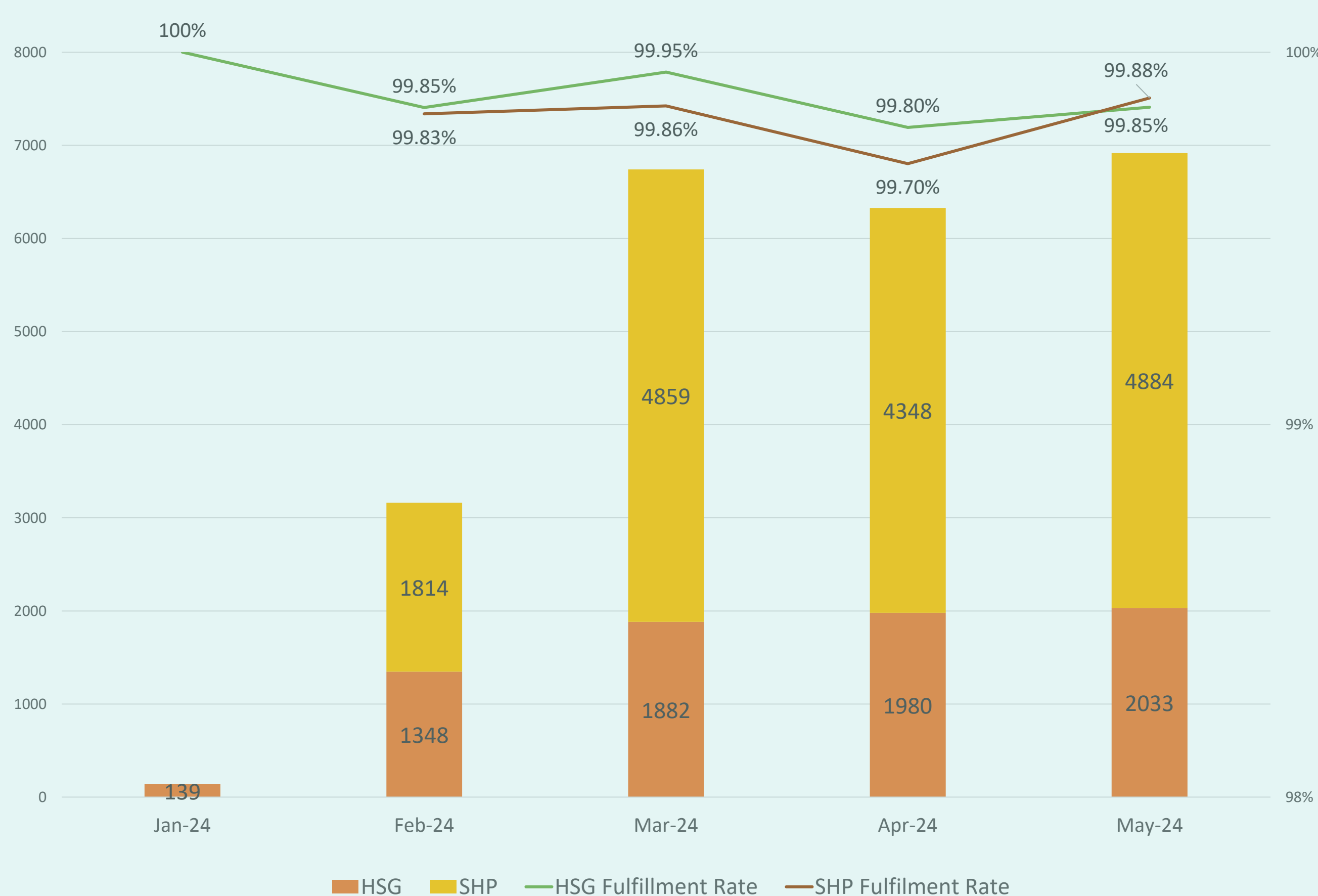
**Verification Code**  
- Generates SMSes to patients  
- SMS contains a 4-digit code/QR code used for verification upon delivery

**Self-Help Portal**  
- For patients to reschedule deliveries and get delivery status updates

**Order Fulfilment by Drivers**  
- Verifies Order collection from NCFP One  
- Orders are only active during the scheduled timeslot  
- Verification of recipient (via 4-digit/QR code)  
- Verification of parcels at delivery point  
- Proof and acknowledgement of delivery logged in the app

## Results

HSG and SingHealth Polyclinics (SHP) Rx orders fulfilment (Jan 24 – May 24)



Picking accuracy: 100% (right drug, dose, strength)

Delivery accuracy: 99.99% (0.01%: Incorrect address provided)

Successful delivery: 99.9% (0.01%: patient/HCI cancelled)

Delivery timeliness: 99.66% (0.34% due to weather and traffic)

## Key Enablers to Project Success

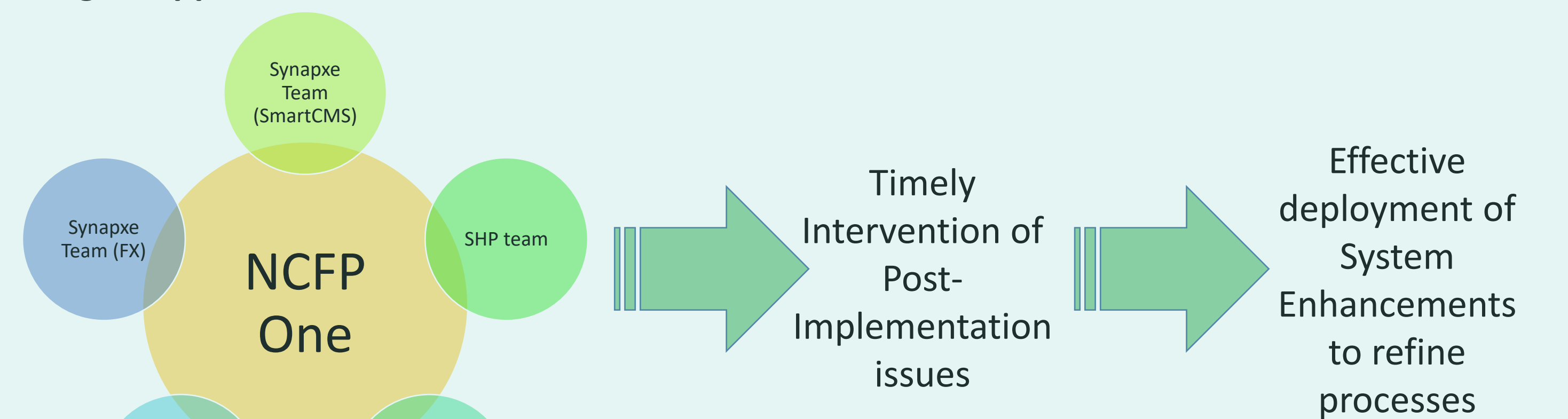
### 1. Multi-Client Model for NCFP One

Retail Pharmacy License with e-Pharmacy provision allows robustness in adopting NCFP One

10 SHP locations through 1 Pharmacy System

443 HSG Clinics through 17 Clinic Management Systems (CMS)

### 2. Strategic Support Structure



## Conclusion

The fully integrated design of our systems which requires no manual interventions have shown to ensure the accuracy of Rx order fulfilment to achieve high level of delivery success rate and timeliness. The achievement of this model proves the feasibility of outsourcing medication fulfilment, making NCFP One a pioneer of such services.

NCFP One has plans to embark on automation to scale up our capacity and capabilities, in preparation to support more HCIs and extend this service into the community care.