

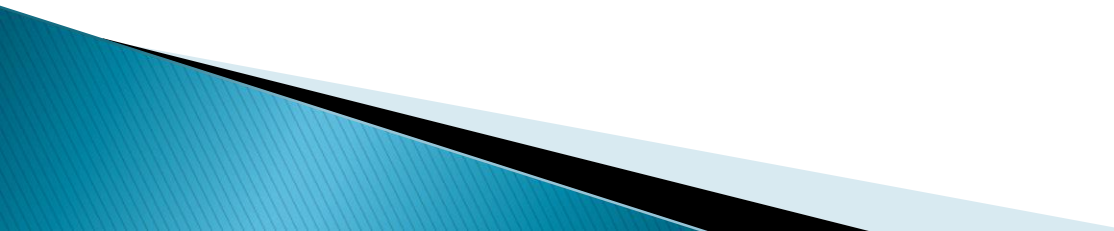
Market Analysis and Process Re-engineering of Physiotherapy consumables

(At Portea Medical)

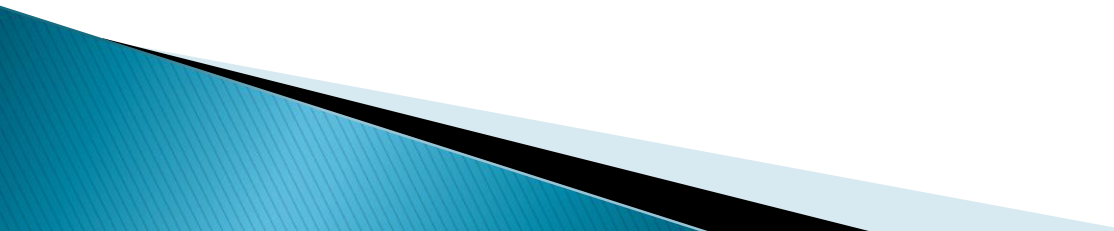
By

Dr. Meenakshi Sharma
*MBA Hospital and Health
Management
Academic year, 2015-2017*

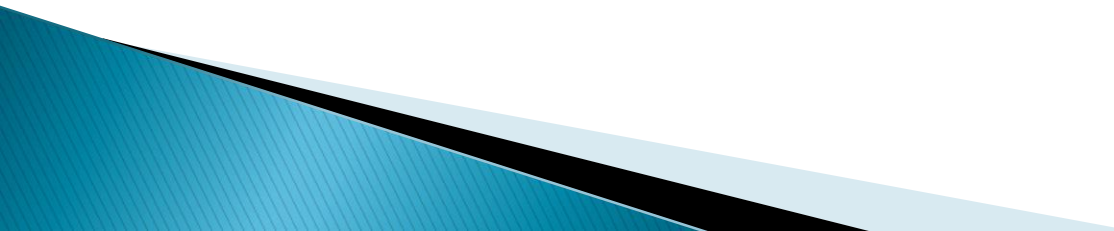
Introduction

- ▶ Portea Home healthcare (2012) is one of the pioneer start-ups for home healthcare in India with 17 centers across India and 4 centers in Malaysia.
 - ▶ Portea is healthcare with technology.
 - ▶ It provides primary healthcare more accessible, affordable and accountable to patients.
 - ▶ As one of the verticals in the organization, the equipments departments plays a key role in ensuring the required equipments are procured and managed for the smooth operations of other teams.
- 

- ▶ Also in parallel, the equipment department also has its own business models where it does engage hospitals and other organizations in B2B model while it also engages customers in B2C model.
 - ▶ The equipment department not only sells the equipments and consumables but also has a business model where it rents out the equipments to its partners on a regular basis.
 - ▶ Currently the equipment department has 7 different categories of products, some of them are respiratory and sleep, Geriatric and mobility, cardiac care, mother and baby care and physiotherapy and orthopedic.
- 

- ▶ The present study is focused on the physiotherapy and orthopedic product line of the equipment department. The product was first launched a year ago and has not managed to get traction and realize its full market potential.
 - ▶ In the present study, we look to identify the challenges involved in the product line, bring in newer plans for process engineering and also launch a program to up sale the products amongst the employees/consultants.
- 

Objective –

- ▶ To estimate the current market potential of physiotherapy consumables/equipments product line.
 - ▶ To identify the challenges in the existing process line and propose process re-engineering.
 - ▶ To establish a new program to up sell the product line to Portea's Physiotherapy employees and consultants.
 - ▶ To build Life Time Value for Physiotherapy and for Customer Engagement.
- 

Methodology -

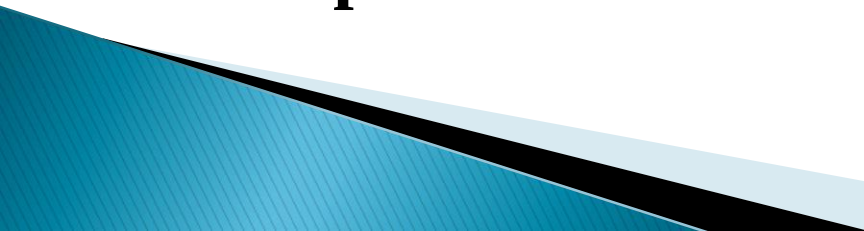
- ▶ **Study Type-** Descriptive Cross Sectional Study

- ▶ **Study area:**

At present Equipment Service is available in 17 cities but PT Consumables service was available only in 9 cities out which we chose 5 Metro cities including Calcutta, Hyderabad, Chennai, Bangalore and Delhi as our Physiotherapy service is running properly their.

- ▶ **Study period:** 3 months from Feb to May 2017

- ▶ **Sample size:** Patient data of 2000 individuals



Source of Data collection

- ▶ **Operations Portal-** Operations portal is an end to end IT software deck custom developed by in house development team.
- ▶ **Subject matter expert (SME) of Physiotherapy-** A SME in physiotherapy is a person who is well experience in the domain of physiotherapy.
- ▶ **Physiotherapy coordinator (PCO)-**A PCO in Physiotherapy is a Senior Physiotherapist who has set of Physiotherapist under him/her and helps in coordinating and solving the case when a junior physiotherapist not able to manage.
- ▶ **Branch Engagement Officer BEO-** BEO is a part of Customer Engagement and referral team who engages with old client and encourages Physiotherapist in bringing cross referral.
- ▶ **Equipments Operation team** - They are the group of people including a Operation Manager, Coordinator, Biomedical Engineer, Store Manager, Service Executive.
- ▶ **Product managers of Equipments-** PM is the one who take cares of launching a new Product line comprising of several products of similar categories.

Results and Data Interpretations:

Disease Profile:

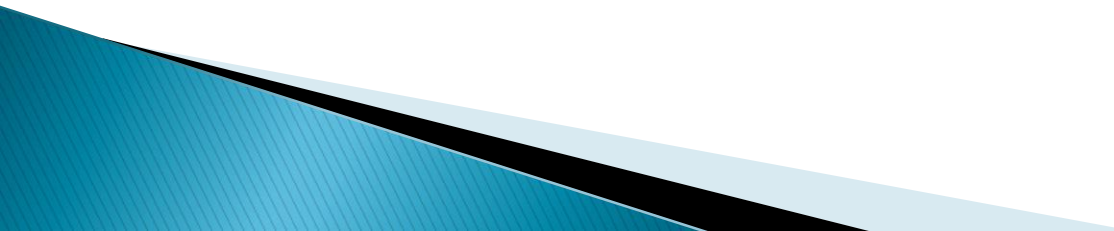
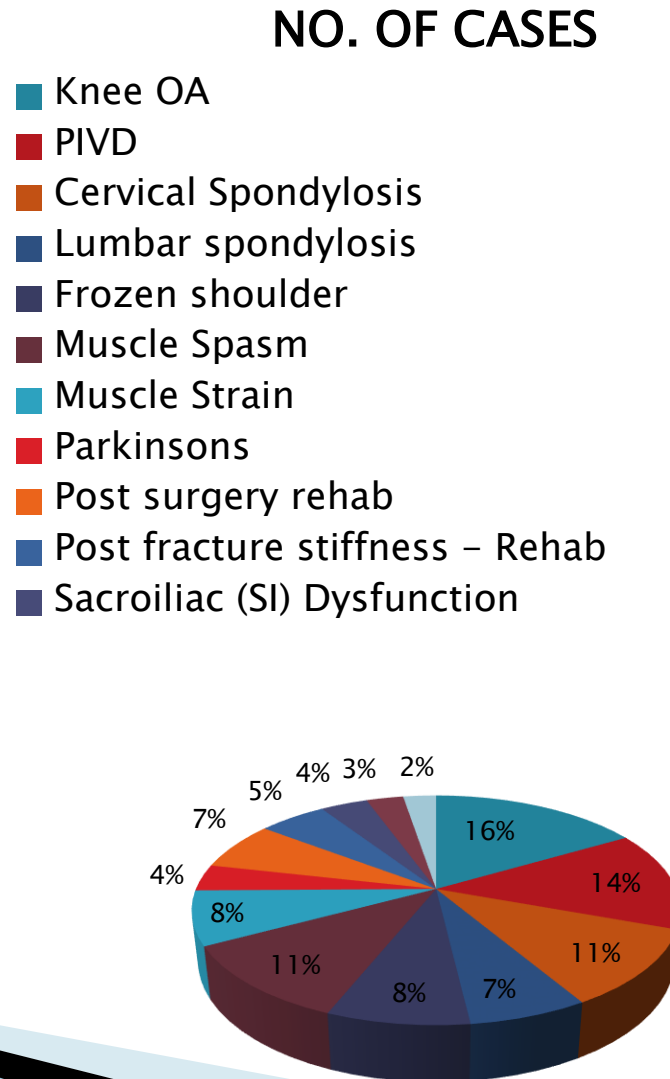
- ▶ To begin with, a complete list of disease profiles under Physiotherapy categories were collected which are 45 in number.
 - ▶ From the list of 45 disease categories, top 13 disease categories.
 - ▶ A small subset was chosen as this would help in inventory management which is one of the biggest challenges.
- 

Figure :- Pie chart representing the share of top 13 disease categories under physiotherapy portfolio.



Products of PT Consumables:

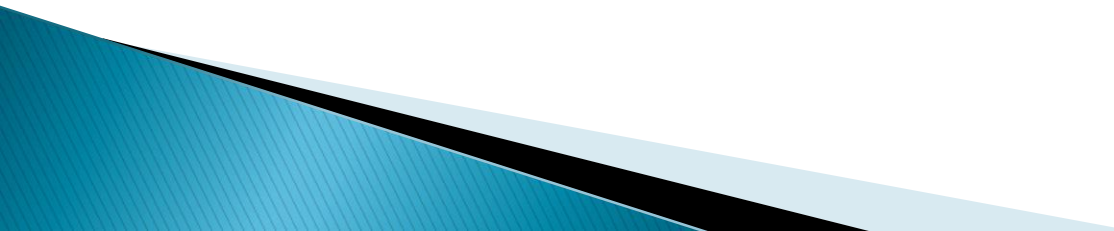
- ▶ Based on 1 year utilization of PT Consumables, we identified the fast moving and slow moving equipment categories.
 - ▶ This data will help us in understanding the kind of Inventory which is required to be maintained which will enable in effective Inventory Management.
- 

Table :- Fast and slow moving equipment categories.

Sr No	Top fast moving products	Bottom Slow moving products
1	Cervical pillow	Commode raiser
2	Dr cool	Foot Drop Splint
3	Hot Cold packs/Gel Packs	Anti-Embolism Above Knee Stockings (Pair)
4	knee brace/cap	Auxiliary Crutch (Pair)
5	Knee Brace Long Type	Fahrenheit Sauna Belt
6	Ls belt/corset	Medical Compression Stocking Below Knee
7	Open patella knee cap	Premium Orthopaedic Heat Belt
8	Silicon sole	Hand grip exerciser
9	Stockings varicose	
10	Swiss Ball	
11	Thera band	
12	Cervical Support Pillow	
13	Cervical Traction Kit	
14	0.5 Kg Weight Cuff	
15	Spirometer	

Table :- List of top selling equipments/consumables under each disease categories

DIAGNOSIS	PT CONSUMABLES						
Knee OA	Hot Cold packs/Gel Packs	dr cool	knee brace/cap	Open patella knee cap	0.5 KG WEIGHT CUFF	Thera band	
PIVD	Hot Cold packs/Gel Packs	dr cool	Ls belt/corset	Swiss Ball			
Cervical Spondylosis	Hot Cold packs/Gel Packs	Cerival pillow	Cervical Traction Kit	Thera band			
Lumbar spondylosis	Hot Cold packs/Gel Packs	dr cool	Ls belt/corset	Fahrenheat Sauna Belt	Swiss Ball		
Frozen shoulder	Hot Cold packs/Gel Packs	Thera band	Swiss Ball	0.5 KG WEIGHT CUFF			
Muscle Spasm	Hot Cold packs/Gel Packs	dr cool	Thera band				
Muscle Strain	Hot Cold packs/Gel Packs	dr cool	Thera band	0.5 KG WEIGHT CUFF			
Parkinsons	Swiss Ball	0.5 KG WEIGHT CUFF	Thera band	Spirometer			
Post surgery rehab	Hot Cold packs/Gel Packs	Spirometer	Thera band	0.5 KG WEIGHT CUFF	Swiss Ball	Stockings vericose	
Post fracture stiffness Rehab	Hot Cold packs/Gel Packs	0.5 KG WEIGHT CUFF	Thera band				
Sacroiliac (SI) Dysfunction	Hot Cold packs/Gel Packs	Ls belt/corset	Swiss Ball				
Stroke	dr cool	Knee Brace Long Type	Stockings vericose	0.5 KG WEIGHT CUFF	Thera band	Spirometer	Swiss Ball
Total knee replacement - Post surgical rehab	dr cool	Hot Cold packs/Gel Packs	Spirometer	Stockings vericose	Knee Brace Long Type	0.5 KG WEIGHT CUFF	Thera band

Analysis of the Market Size:

- ▶ The next task was to determine the market size/potential of these Physiotherapy consumables/equipments by understanding the average ticket size of each category.
 - ▶ Further to understand the city wise sales of each of these consumables, we collect data pertaining to 4 cities viz., Bangalore, Delhi, Hyderabad and Kolkata. Table shows the number of cases under each of the 13 categories.
 - ▶ To understand a sample market size, we then determined the cost of each of these consumables with the number of sales of under each categories.
 - ▶ By doing so, the total market size was estimated to be between Rs. 4 lakh to Rs. 6 lakh.
- 

► **Table :- Summary of Number of cases city wise and a projection of market size.**

SR NO.	DIAGNOSIS	TOTAL CASES	Total Value of the PT Cons.	Median Value	Total Revenue	Min Revenue
1	Knee OA	162	4292	360	695304	58320
2	PIVD	66	4818	939	317988	61974
3	Cervical Spondylosis	91	3188	783.5	290108	71298.5
4	Lumbar spondylosis	97	6417	1200	622449	116400
5	Frozen shoulder	93	2472	511	229896	47523
6	Muscle Spasm	77	3522	582	271194	44814
7	Muscle Strain	72	3772	511	271584	36792
8	Parkinsons	15	2582	566	38730	8490
9	Post surgery rehab	38	3710	566	140980	21508
10	Post fracture stiffness - Rehab	31	1272	440	39432	13640
11	Sacroiliac (SI) Dysfunction	19	2318	678	44042	12882
12	Stroke	52	6585	688	342420	35776
13	TKR - Post surgical rehab	56	5825	582	326200	32592
		869			3630327	562009.5
	Total Cases	2002	After 15% discount		30,85,778	4,77,708

Inventory Management:

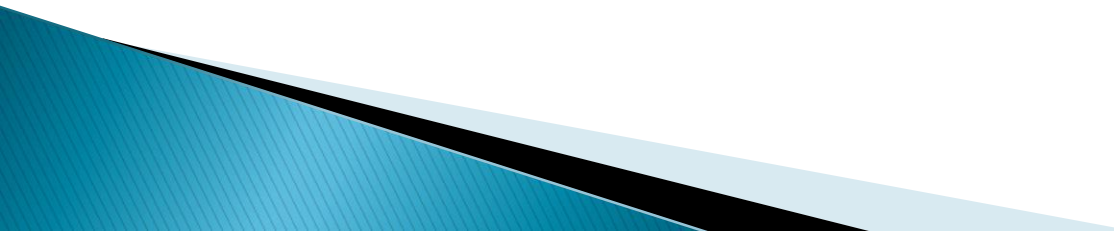
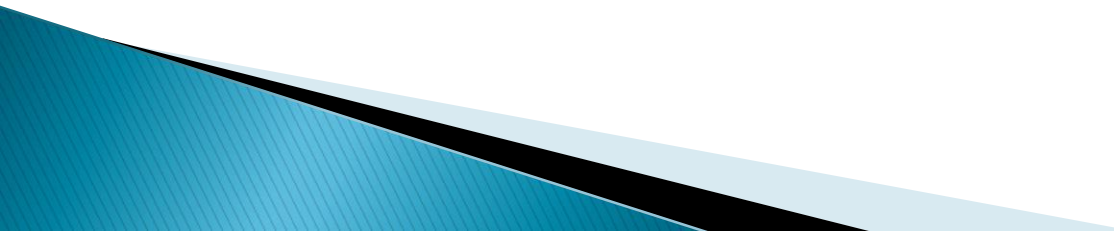
- ▶ To further effectively manage the portfolio, a stock inventory of all the available consumables/equipments under Physiotherapy was undertaken. Table shows the stocks of PT consumables available in 6 major stock houses of the company (Bangalore, Ahmadabad, Delhi, Mumbai and Pune).
 - ▶ The categories highlighted in red fall under slow moving categories of consumables which are high in stock numbers.
 - ▶ The next task is to effectively liquidate these stocks through special offerings and discounts or making a buy back with the manufactures.
- 

Table :- Stocks available in 6 major cities of operations under each consumable categories.

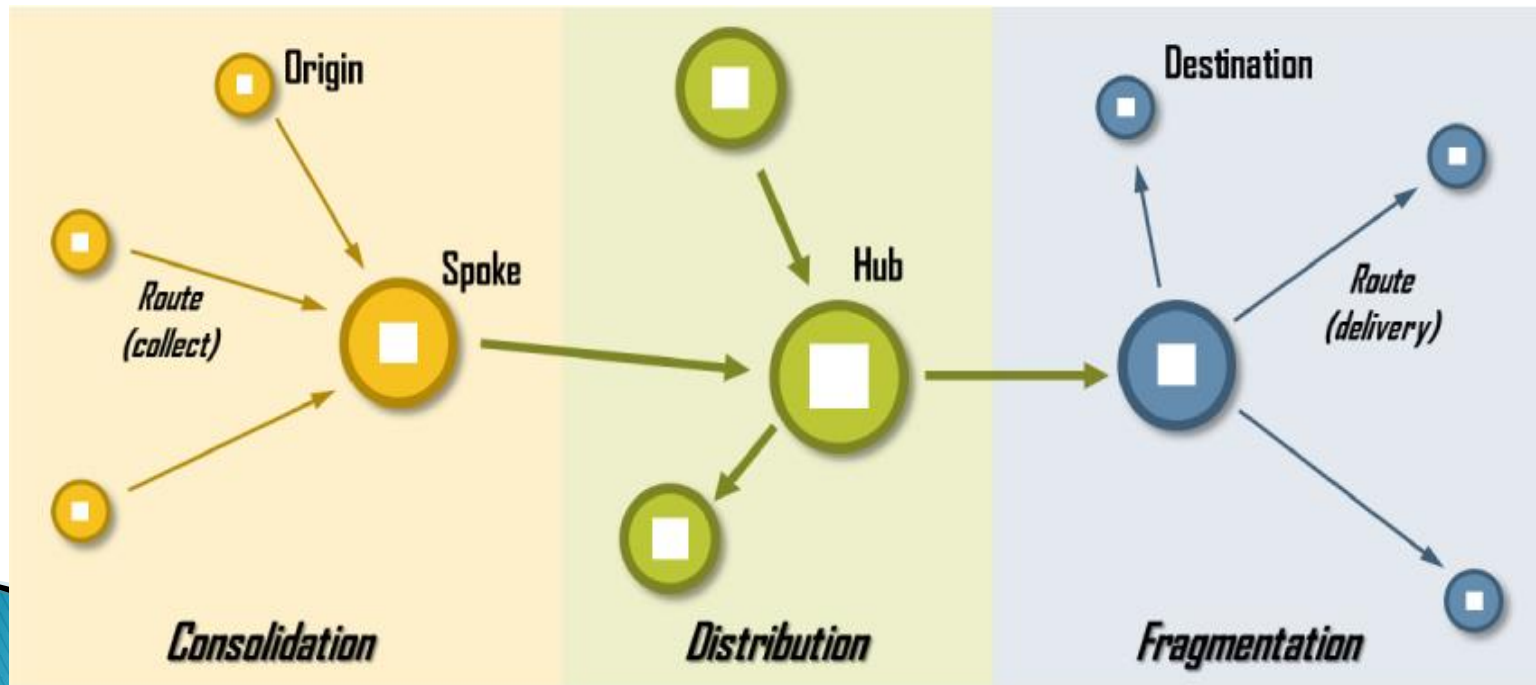
[illegible]

Discussion:

- ▶ We have estimated the market size and undertaken the stock of inventory.
 - ▶ The challenge now is to effectively build in a process to sales and distribution of Physiotherapy consumables/equipments. Here we explore the existing method, identify the shortcomings in the existing models and proposing of a new process.
 - ▶ First we explore the existing process which is called Stores-Sub stores Model/Hub & Spoke model.
- 

Stores Sub Store Model/Hub & Spoke Model:

- ▶ It is based on Hub and Spoke Model- in which Hub—is the store and Spoke are the sub stores. In our context of home healthcare, the model will be further referred to as PCO model where Hub/Store is Equipment operations and Spoke is PCO. Figure is diagrammatic representation of Store-Sub store model.

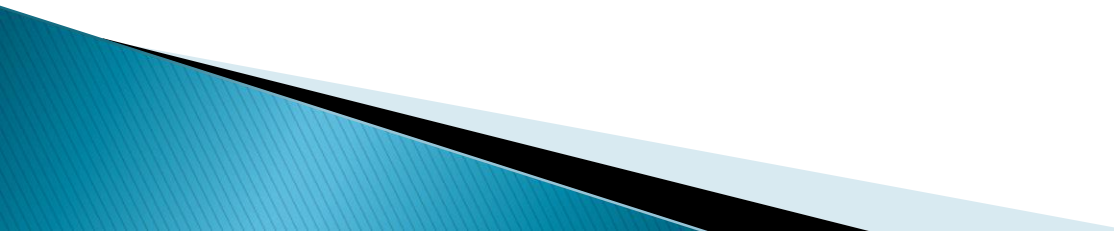


Concept and Meaning of Central with Sub Stores:

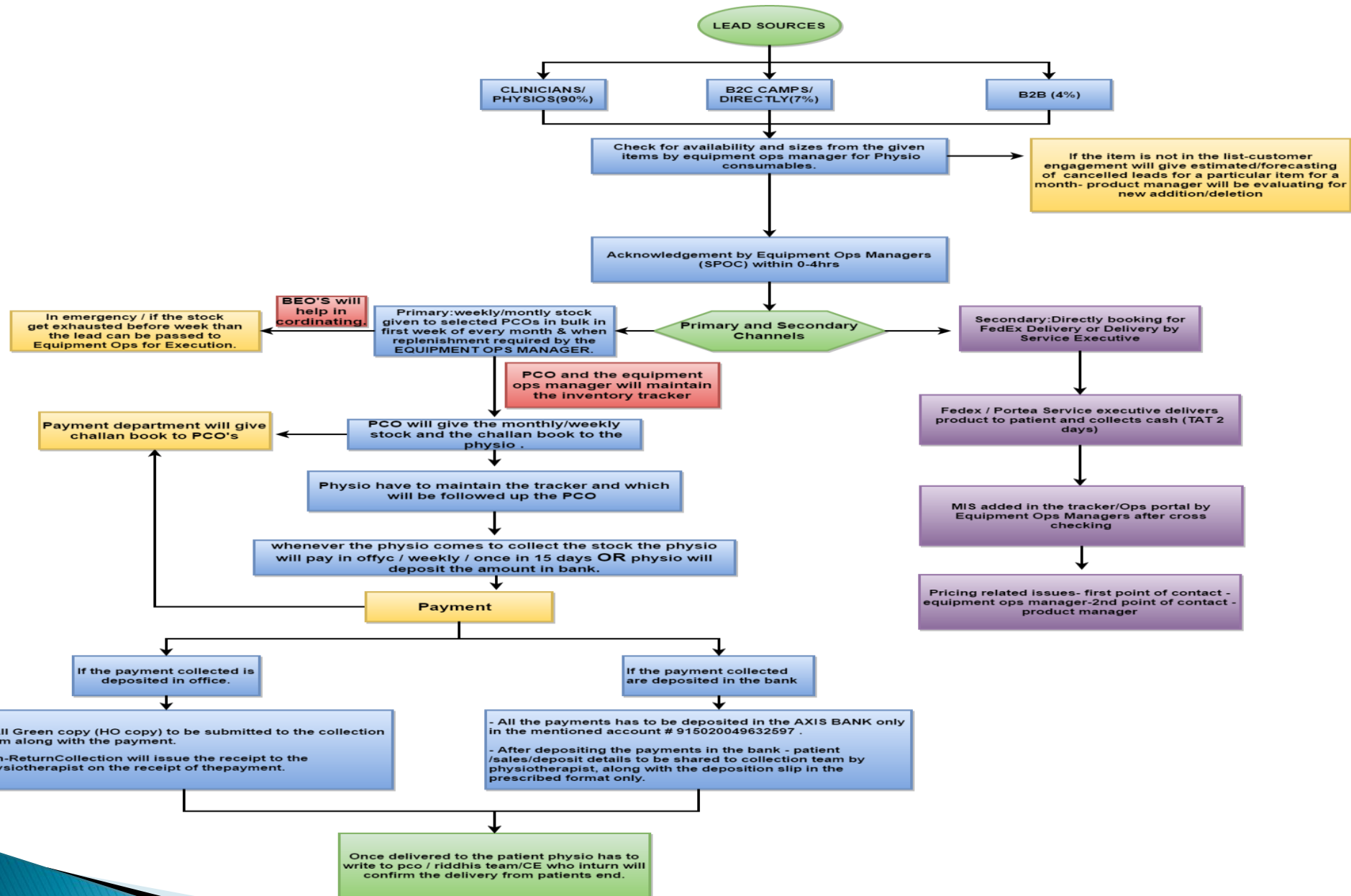
- ▶ This is a mixed store system, a mix of centralized and decentralized stores.
 - ▶ Under this store system, sub-stores are established in different departments according to the requirement of the company.
 - ▶ Sub-stores are maintained at each department when the central store is at a distance from the production department. Such sub-stores are managed and controlled but the central store itself.
 - ▶ At the beginning of a period, the central store issues a fixed quantity of materials to the sub-stores.
- 

- ▶ At the end of the period, sub-stores send a filled requisition form to the central store to maintain the stock to a predetermined level.

- ▶ **STAKEHOLDERS AND RESPONSIBILITIES:**

- Equipment Ops Manager—acts as Store
 - PCO--- Acts as Sub store
 - BEO--- Acts as Separate channel to help PCO
 - Cash Collection team—Cash collection
 - Customer Engagement team- for Forecasting inventory and LTV
- 

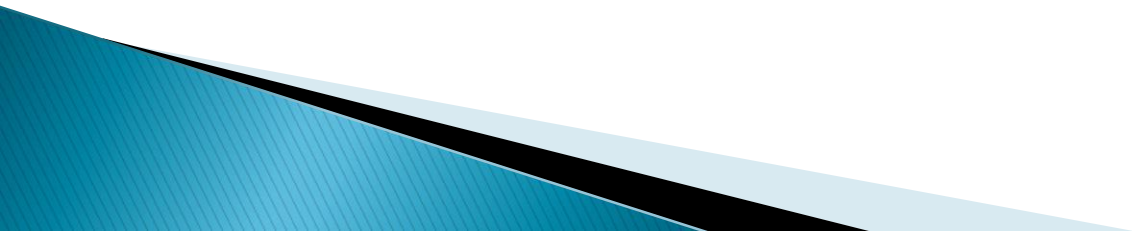
PHYSIO CONSUMABLES / EQUIPMENTS OPERATIONAL PROCESS FLOW



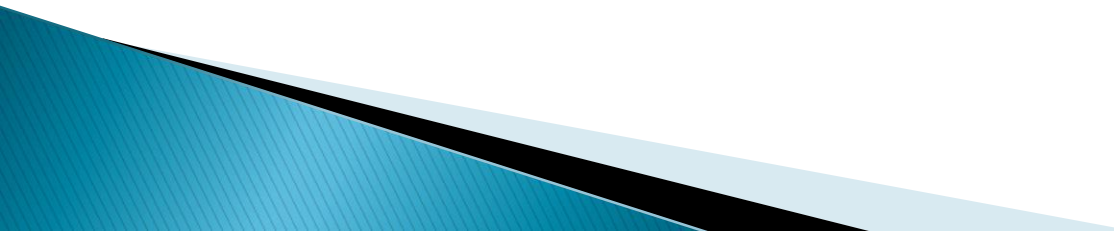
Note:

In case of Local Vendor purchase- Ops manager can send the Service Executive to collect the bulk purchase of monthly stock in the beginning of month from Vendor. Then from office Ops manager can forward the PCO stock.

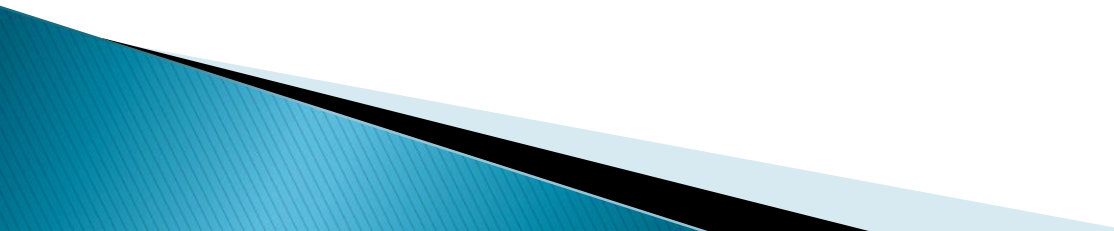
Advantages of Central Stores with Sub - Stores:

- ▶ Overcoming the demerits of centralized stores.
 - ▶ Offering an easier location for storing of materials.
 - ▶ Avoiding delay in issuing materials.
 - ▶ Providing services to meet the special needs of individual departments.
 - ▶ Reducing the internal transportation cost.
- 

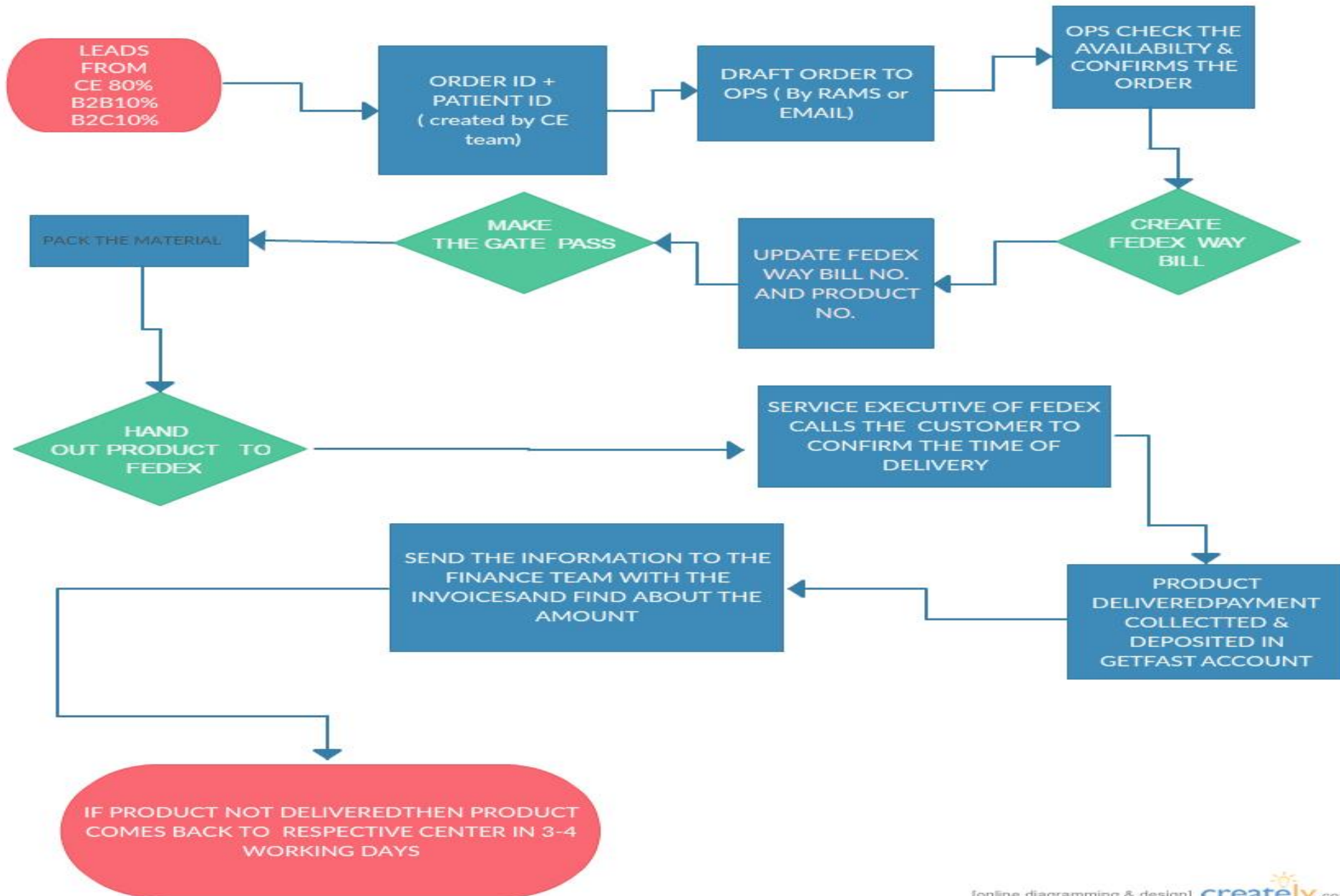
Disadvantages of Central Stores with Sub - Stores:

- ▶ Keeping a track on the stock is a major challenge as there is no electronic tracking system yet in place.
 - ▶ Once a physiotherapist makes a sale, collection of the sale amount by the finance team is a challenge.
 - ▶ Several products come in various sizes and hence become practically not possible to stock large numbers by the physiotherapists.
 - ▶ Damages during transportation etc are issues.
- 

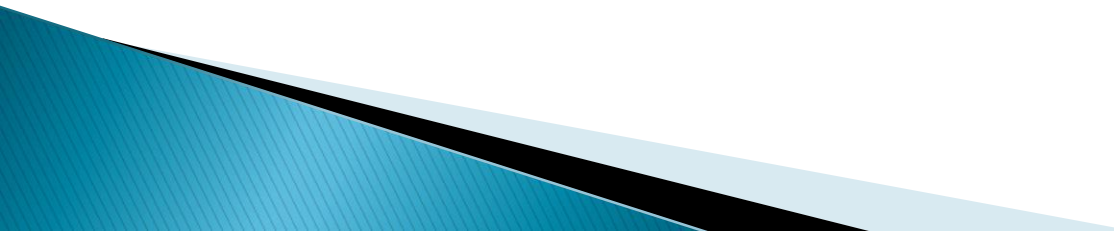
FedEx COD Model:

- ▶ Learning from the previous PCO (store-sub store model), we have proposed another model called FedEx COD model where the products will be directly shipped to the customers and customers have an option to make Cash of Delivery (COD) for the products received.
 - ▶ The turn around time from lead generation to product delivery has not been changed drastically from the PCO model and the average turn around time is about 48 to 72 hours.
- 

FedEx Process Flow



In house physiotherapy equipments purchase program and its policies.

- ▶ In addition to the FedEx model which deals with Business to Customer (B2C model), we have also put in place where our in house physiotherapists can procure the equipments and consumables for their personal practice at a discounted price from the organization.
 - ▶ This also opens up opportunities in terms of business for the organization as Portea has a extensive network of physiotherapists and a discount would encourage them to buy these from Portea rather than external vendors.
- 

Key Findings:

- ▶ The business volumes could be in the size of around Rs. 4 to 5 Lakh per month.
- ▶ To understand the gap between projections and actual sales, we realized that only 42% (366 in number) of the leads were getting converted into sales. This poor conversion ratio may be one the biggest reasons why we have not been able to reach the complete potential of the products. Hence a greater emphasis shall be given to improve the conversion rates.
- ▶ Also, in the case of distribution of physiotherapy consumables through our physiotherapist, we found problems and challenges in the existing PCO model (store-sub store model). Hence we have proposed a new model called “FedEx COD” model

Conclusion –

- ▶ This particular product line has already been in service for over a year, however has not reached its true commercial potential. Hence a process re-engineering has been proposed in this study. As a strategy to increase the sales, a program to up sell the products to our consultants has been proposed in the present study.
- 