CENTRALIZED RADIOLOGY SCHEDULING: HOW IMPROVING ITS EFFICIENCY CAN IMPROVE PATIENT ACCESS TO IMAGING AND SATISFACTION: A CLOSE EXAMINATION OF KEY PROCESS STEPS AND PROCESS METRICS

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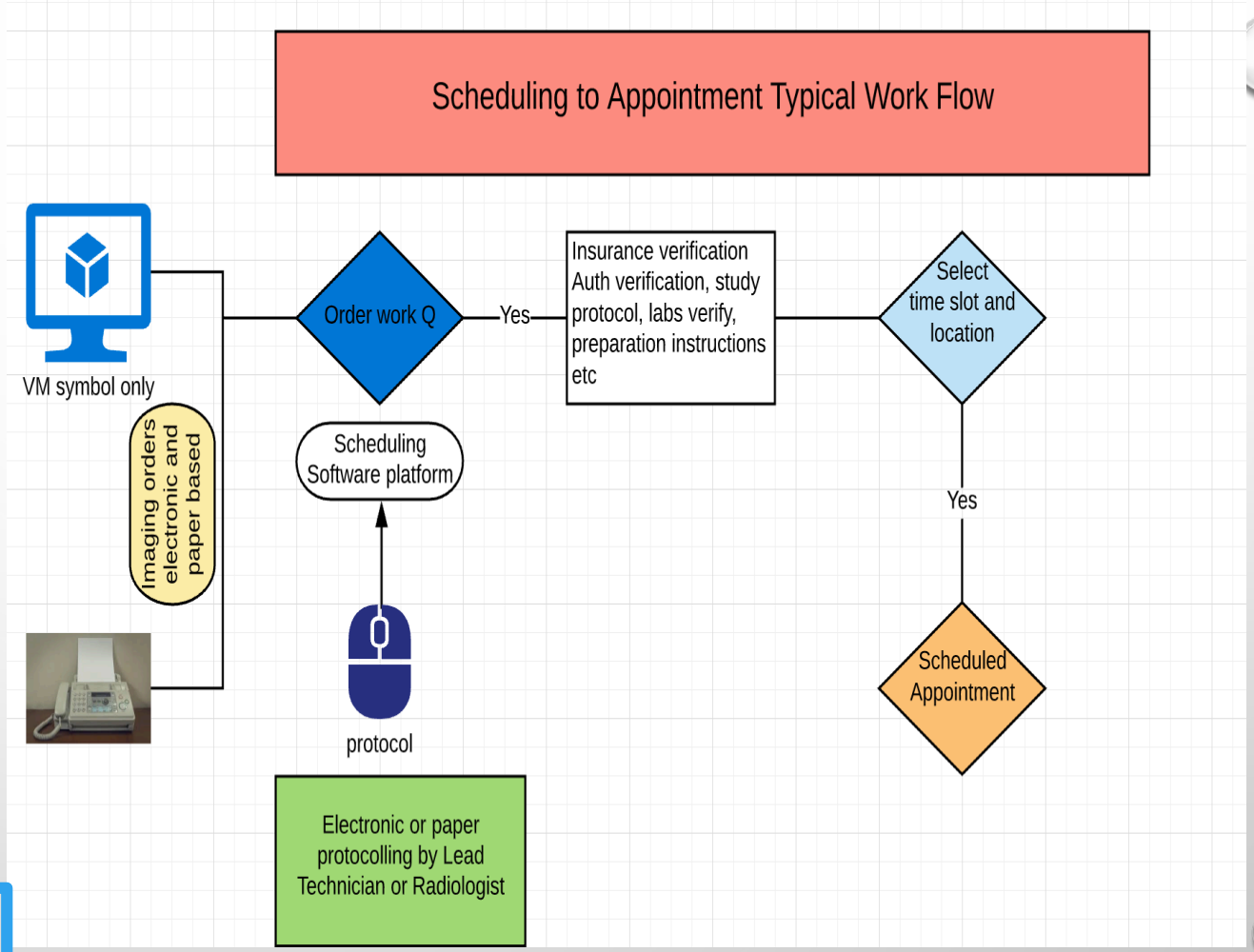
OUTLINE:

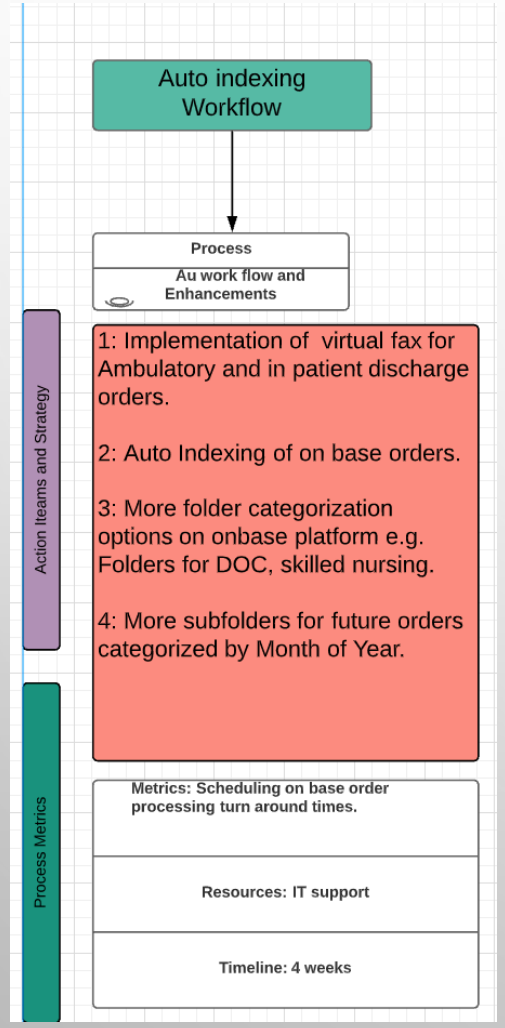
- Describe workflows in scheduling departments of high volume Academic Centers.
- Discuss the processes and bottlenecks in such workflows.
- Highlight process metrics to track scheduling department performance.
- Propose new integrated scheduling models using lean methodology to improve Imaging Access.



Flow Diagram: order to scheduled appointment

- Every process step has lot of variability.
- Call centers induce additional process step.
- Order errors or changes add to delays.
- Modality capacity and availability is critical for scheduling room built.

PROCESS IMPROVEMENT FOR NON ELECTRONIC ORDERS



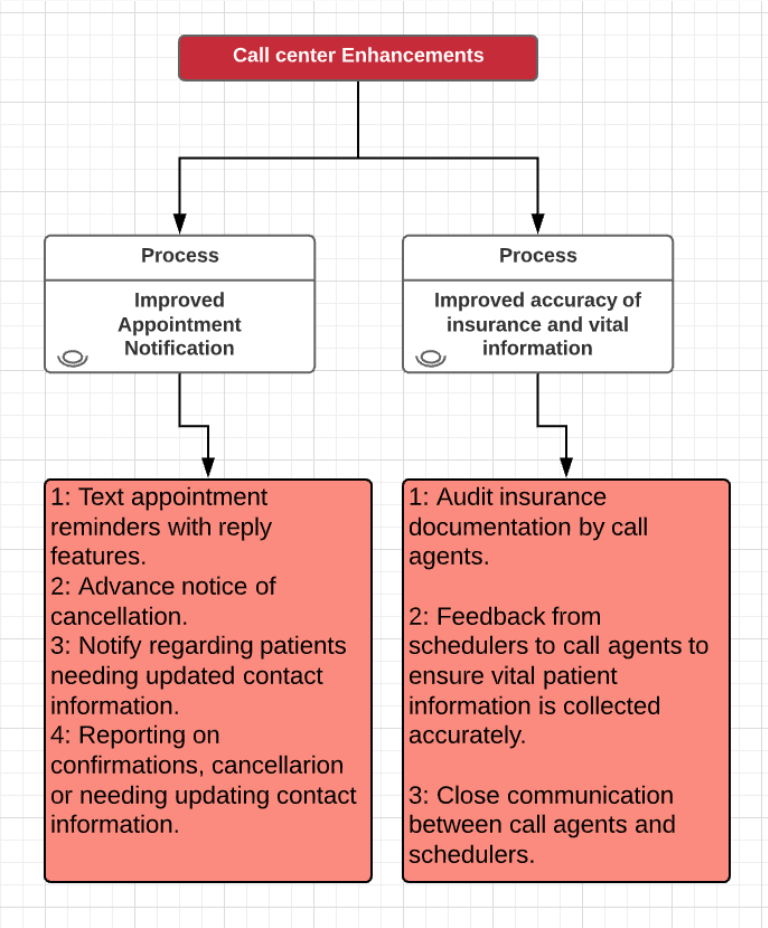
Metrics to measure performance.

Metric	Importance
Indexing Turn around Time	Time taken to index out of network fax based orders.
Manual Indexing error rate	Total number manual indexing errors ex: wrong DOB

Solution Pathways:

- Effort should be made to upgrade to electronic auto indexing/document management pathway, this will not only decrease TAT from order to scheduled appointment but save costs.

PROCESS IMPROVEMENT: CALL CENTER

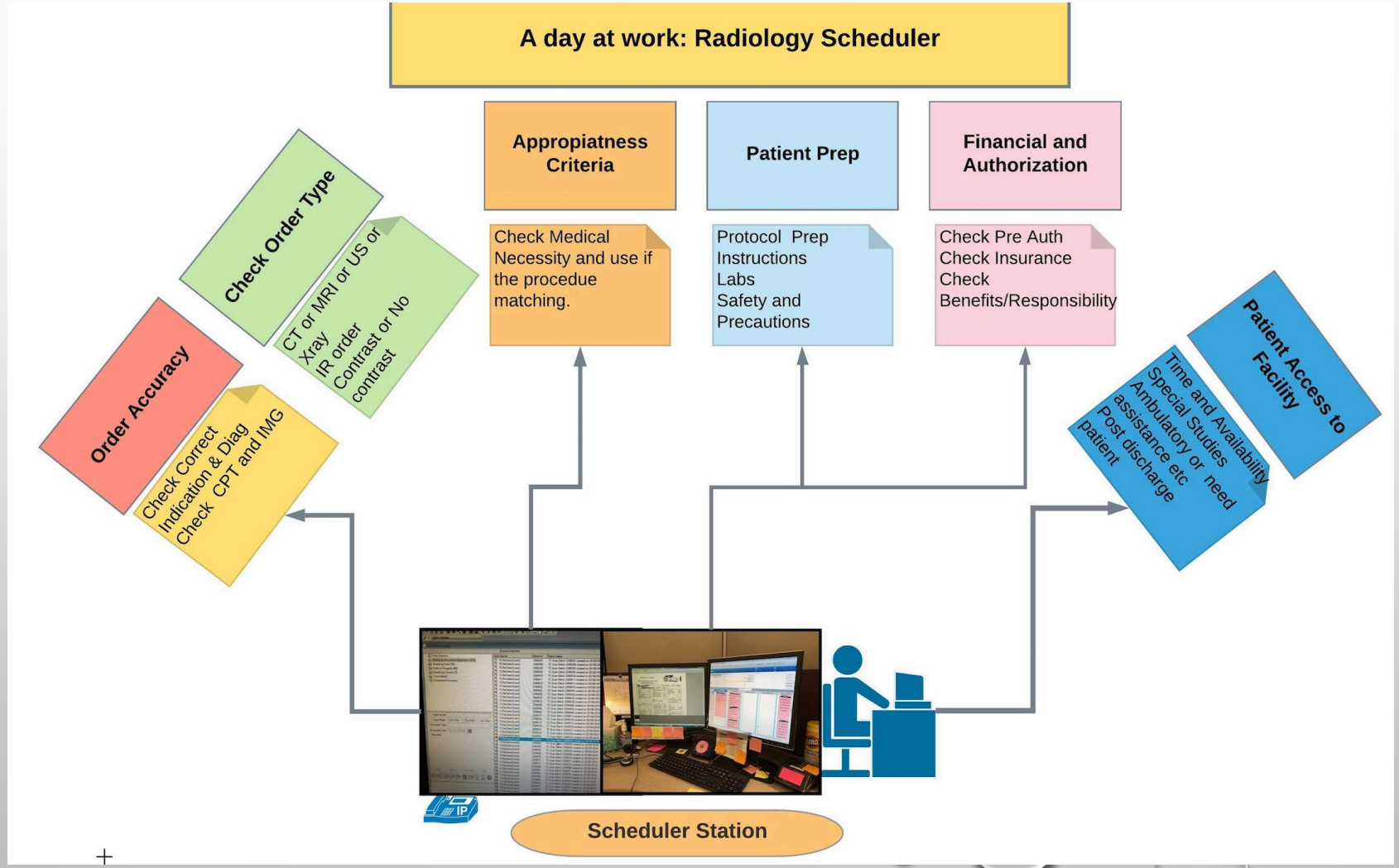


Metric	Importance
% Accepted call volume	High acceptance rate will result in more call capture.
Call wait times	Time to make contact with call agent.
Call processing times	Time to process call aka “talk time”.
Abandonment call rate	Number of calls dropped.

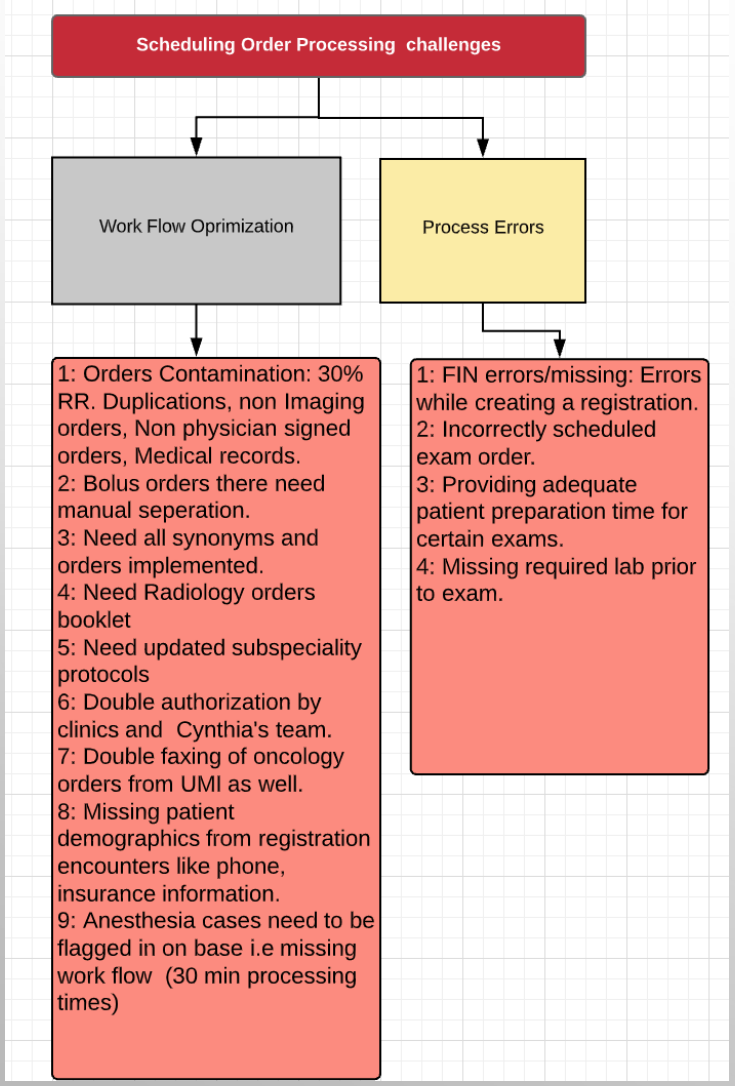
Week of	Total Calls Accepted	Total Calls Answered	% of Calls Answered	Total Calls Abandoned	% of Calls Abandoned	# Calls Answered w/in 30 Seconds	# Calls Answered w/in 60 Seconds	% of Calls Answered w/in 30 Seconds	% of Calls Answered w/in 60 Seconds
October 6, 2019	2,041	2,007	98.33%	34	1.67%	1,701	1,874	84.75%	96.76%

Sample:

A DAY IN TO THE LIFE OF A RADIOLOGY SCHEDULER



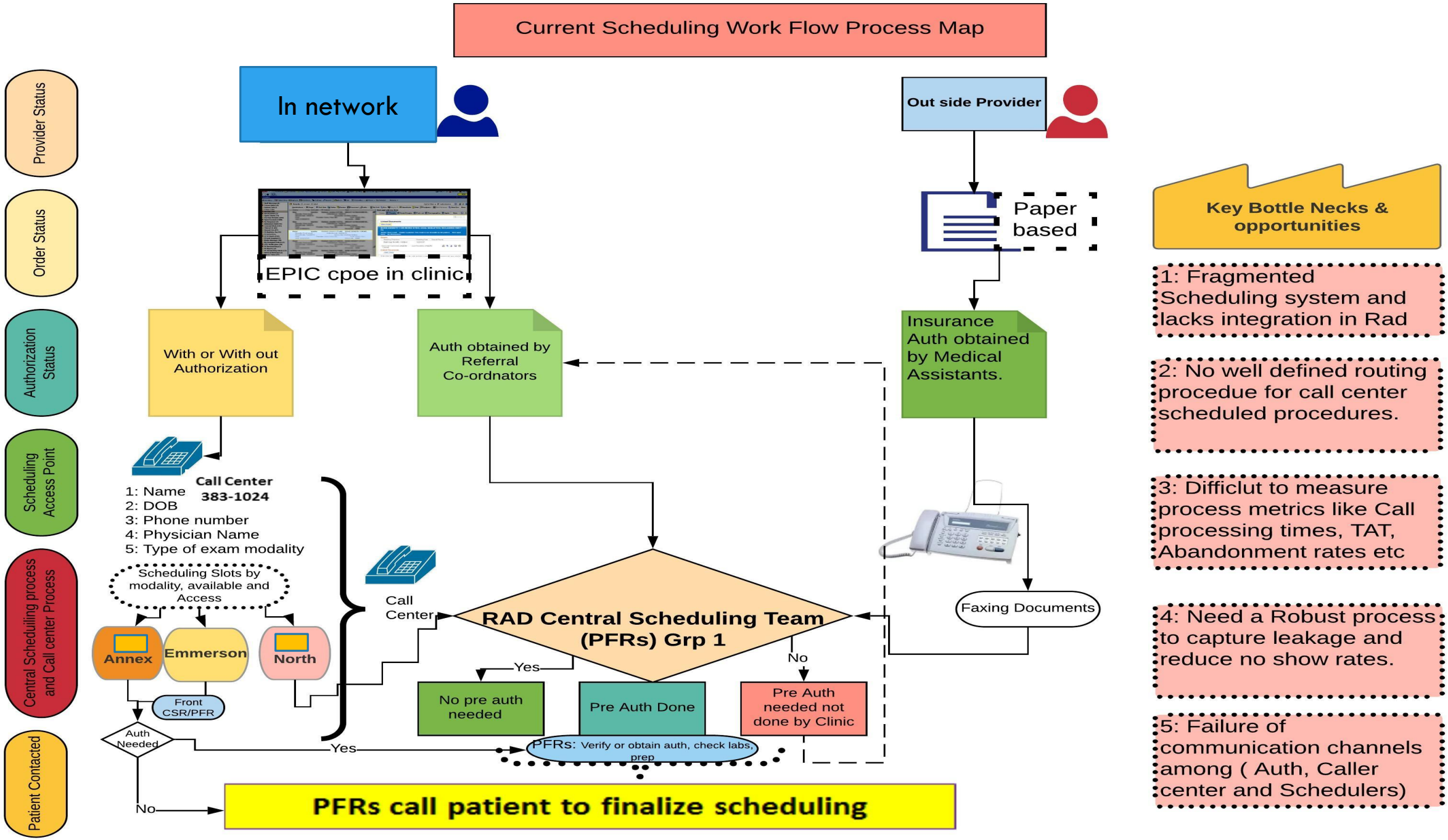
PROCESS IMPROVEMENT: SCHEDULER WORK FLOW



Metric	Importance
Average time to confirm a scheduled appointment (Scheduling TAT).	Time to process an order to confirmation.
Average scheduling errors/month	Errors related wrong location, protocol etc.
Scheduling back log volumes by work Q	Indicator of scheduling efficiency

- Develop service standards for work flow (e.g., to be scheduled, insurance verification, waiting for information)
- Established workflow standards for patient and provider communication.
- Avoid multiple work queues without ownership.

Current Scheduling Work Flow Process Map



Key Bottle Necks & opportunities

1: Fragmented Scheduling system and lacks integration in Rad

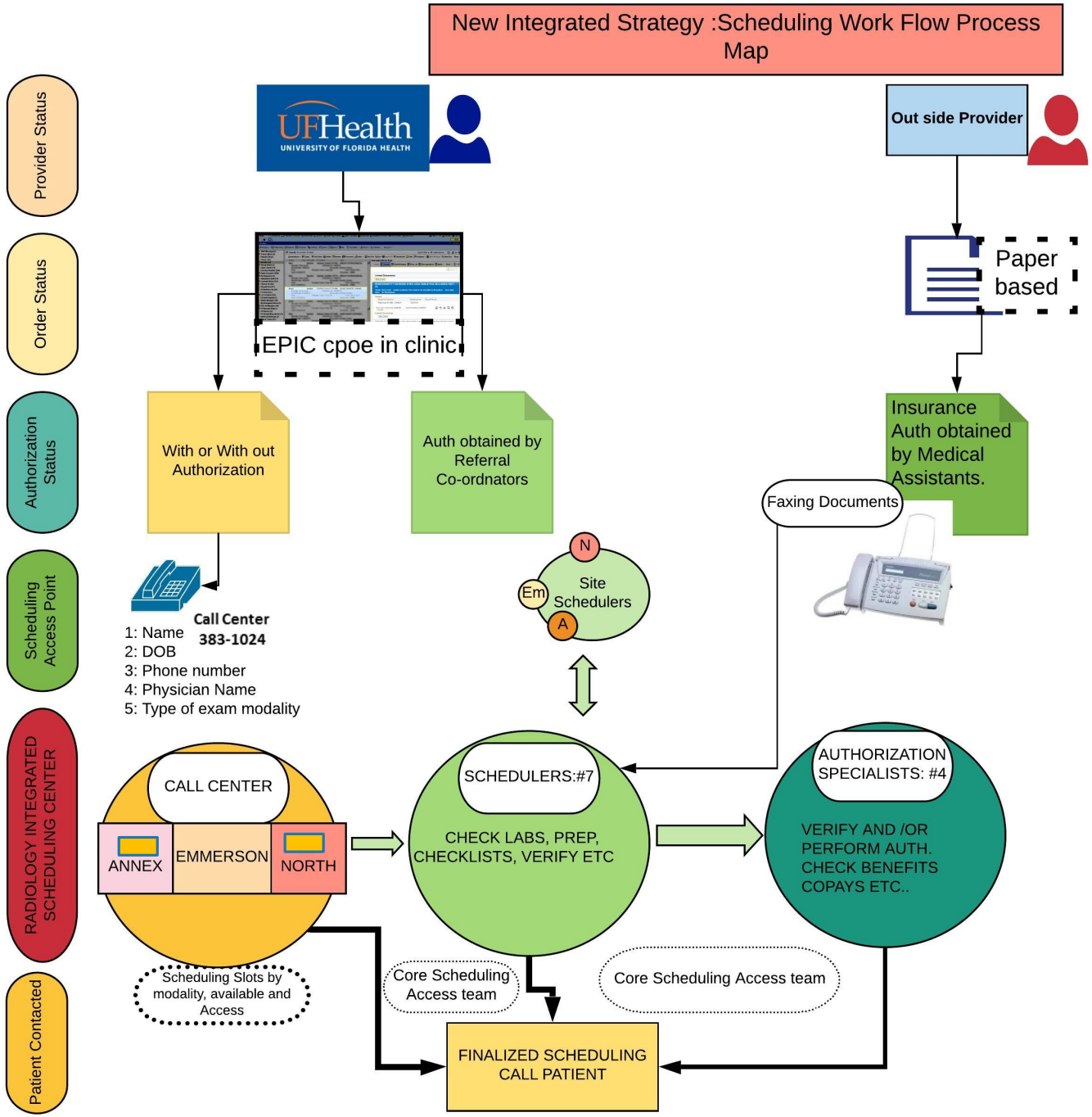
2: No well defined routing procedue for call center scheduled procedures.

3: Difficlut to measure process metrics like Call processing times, TAT, Abandonment rates etc

4: Need a Robust process to capture leakage and reduce no show rates.

5: Failure of communication channels among (Auth, Caller center and Schedulers)

New Integrated Strategy :Scheduling Work Flow Process Map



Strategy

1: Integrated & streamlined in house Scheduling system.

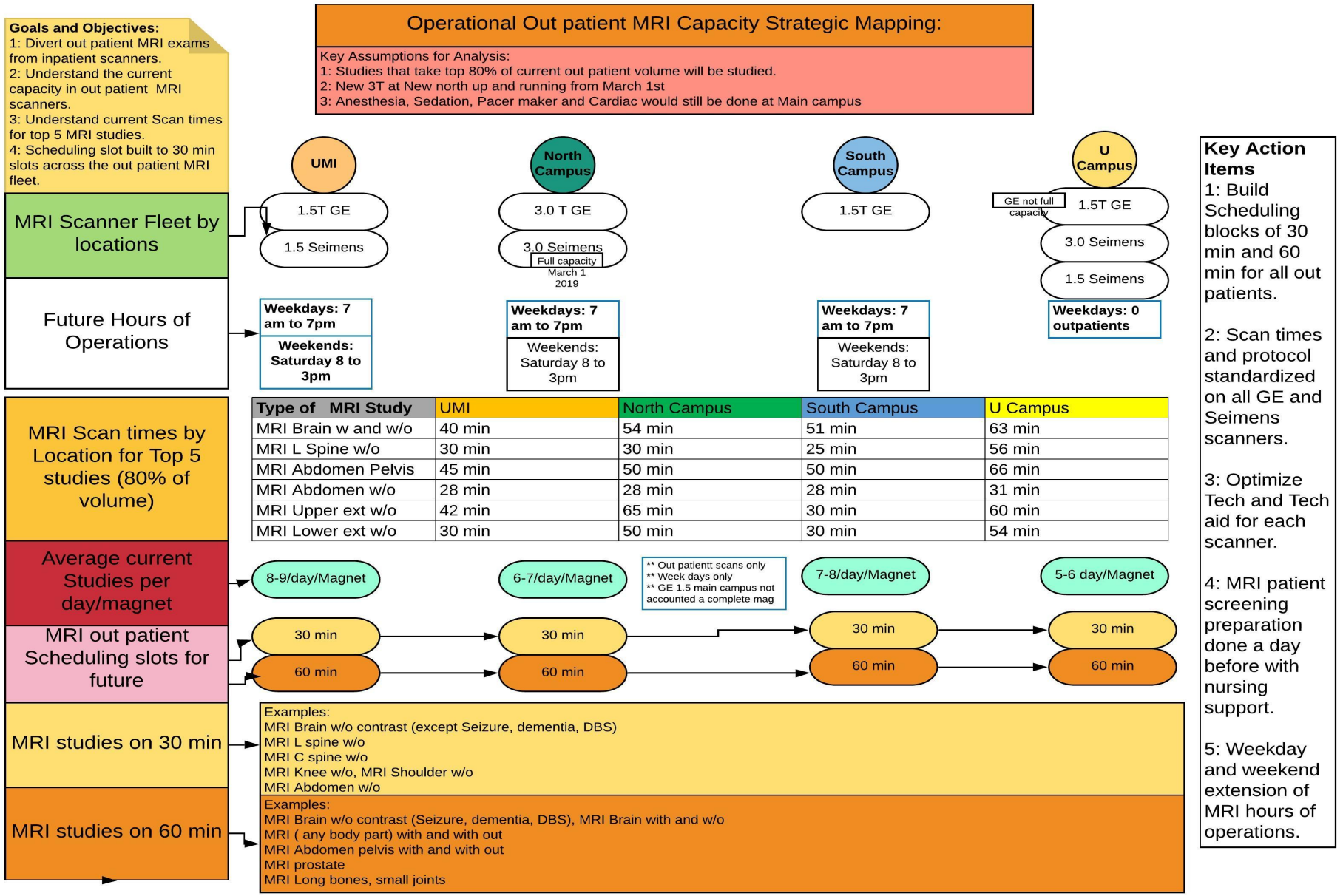
2: Restructed Core scheduling access team: Modelling assembly line process engineering.

3: Analytics and process metrics like Call processing times, TAT, Abandonment rates etc can be measured.

4: Captures leakage and reduce no show rates as accountability is shared by schedulers.

5: Improved reporting and responsibility/accountability of teams therefore reduces attrition of staff. Facilitates tracking productivity.

CASE EXAMPLE OF BUILDING MRI MODALITY CAPACITY



Type of MRI Study	UMI	North Campus	South Campus	U Campus
MRI Brain w and w/o	40 min	54 min	51 min	63 min
MRI L Spine w/o	30 min	30 min	25 min	56 min
MRI Abdomen Pelvis	45 min	50 min	50 min	66 min
MRI Abdomen w/o	28 min	28 min	28 min	31 min
MRI Upper ext w/o	42 min	65 min	30 min	60 min
MRI Lower ext w/o	30 min	50 min	30 min	54 min

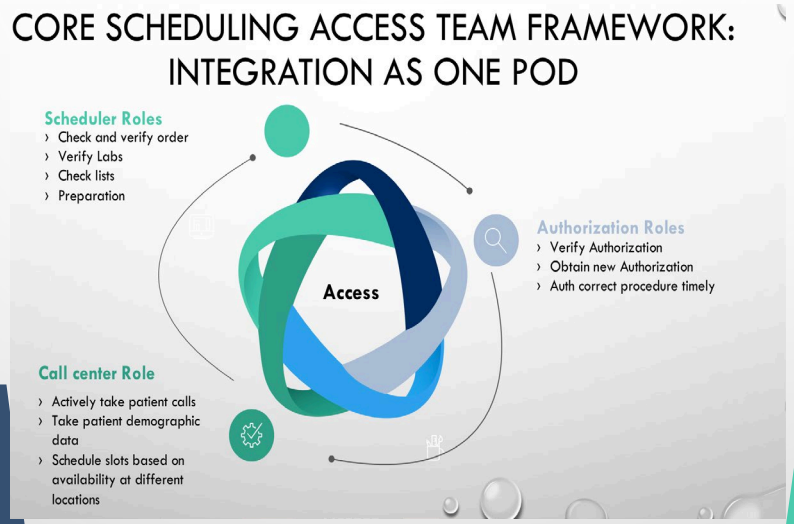
SUMMARY

01. Patient Centered Integrated Radiology Scheduling

- Radiology scheduling is complex and need efficient collaborative scheduling teams to improve access.

02. Integrated POD of Call center, scheduler and Authorization experts.

- Well defined assembly line framework to facilitate communication and accountability.



03. IT scheduling infrastructure

- IT workflow enhancements
- Document management system.
- Advanced analytics tools.

04. Analytics

- Access metrics can be measured accurately.
- Scheduling process & productivity metrics tracked.