Integrating PMJAY Process with Indigenous Software Solutions to Optimise Patient Movement

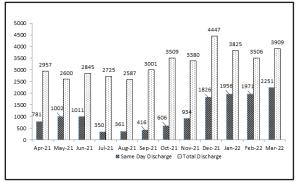
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Aysuhman Bharat is a flagship scheme of Government of India (GOI) which was conceived to achieve vision of Universal Health Coverage. With reference to National Health Policy 2018, GOI launched Pradahan Mantri Jan Arogya Yojna (PM-JAY) for providing secondary and tertiary care under the banner of Ayushman Bharat. National Health Authority which is an apex body to manage PM-JAY scheme from central level, claims to provide benefit to more than 50 crore poor beneficiaries across India. Each family is given benefit of services up to 5 lakh rupees. These number claims PM-JAY scheme as world's largest government sponsored insurance scheme. Today GCRI is one of the largest hospital beneficiary of PM-JAY scheme among government institutes of India and is also ranked as 2nd best performing public hospital (Large State) by National Health Authority under PMJAY network in September 2021. Every day more than 450 beneficiaries visit PM-JAY department of GCRI for different processes like registration in scheme, pre authorisation, and discharge process. Managing such large number of patients at PM-JAY desk has not been an easy task and to optimise the entire process of PM-

JAY scheme, we have introduced new indigenous IT software adjacent to existing GCRI HMIS (GCRI.net).

Key features of this indigenous software:

- With every registration and pre authorisation in PM-JAY scheme, a token number was generated which helped to streamline all other processes.
- All PM-JAY desks were given a unique number through which all the processes can be tracked.



*intervention of indigenous software was introduced in October 2021

Figure 1: Mean monthly patients enrolled under PMJAY scheme for same day discharge and overall discharge at GCRI

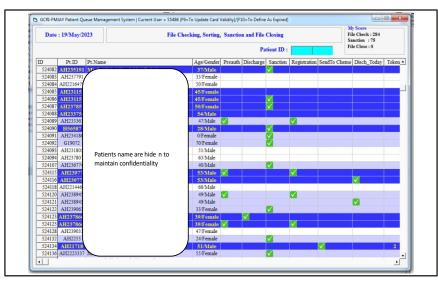


Figure 2: File check module to sort and assign token number to PM-JAY beneficiaries

- Nursing office, PMJAY medical officer and RMO were able to track pending work at pre authorisation desk, chemotherapy wards and for discharge, with all these data they were able to do timely intervention for delays.
- A central console was created for top line management through with which they were enabled to track entire workflow of schemesuch as number of registrations, preauthorisations and discharges done through various desks. This feature provides valuable insights to management

for managing manpower and to evaluate functioning of PM-JAY scheme.

Newly formed software was linked to GCRI's HMIS software (GCRI.net) and with two of PM-JAY softwares named Beneficiary Identification System (BIS) and Transaction Management System (TMS), this has ensured seamless integration of data and records. This software helped significantly to make reports for management presentations as well as for providing various government reports.

19-05-2023 Gene	rate Export					I	ive Dashboa	rd				
		1			Case Wise Detail	Total Discharge						
Today's Patient Journey at PMJAY			L		Prea	uth V/s Approval Analy						
	Total Preauth		Ĭ		Pending F	les for Pre-Auth/Discha	rge	Ĩ	Day Care Chemo Ward Activity	Summary		
Token# PT_Id	PT_Name	Age/G	ender S	SenttoWard	RecdAtWard	RxCompleted	RecdAtPMJAY	CancelToken		-		
1 G36410	1	55/Fe	male	08:35:00	10:23:43	11:42:09			Total Pt Sent to Chemo Ward : 120 Total Pt Sent With Dischrage : 62			
2 AH21718		51/N	lale	09:40:42	09:41:58	12:15:29			Total Pt Sent With Discharge : 62 Total Pt Sent W/0 Discharge : 58			
3 AH232739		33/X	lale	09:41:39	09:51:06	14:19:16			Total Pt Recd at Chemo Ward : 108			
4 AH225262		41/3	lale	09:43:41	10:12:27	12:13:47			Total Pt Not Recd atChemo Ward : 12			
5 AH236916		32/Fe	male	09:44:34	10:47:04	14:09:07			Total Pt Rx Completed : 108			
6 AH233754		54/N		09:45:49	10:38:21	13:41:49			Total Pt Recd back at PMJAY : 56			
7 AH2223026		54/3	lale	09:51:10	10:34:09	18:29:17			Total Pt Pending toCome at PMJAY: 6			
8 AH215443		38/3		09:56:56	10:41:16	17:03:08	17:49:38					
9 AH236597		37/Fe		09:59:39	12:14:32	18:29:18						
10 AH2212386	Patients name	16/እ		10:08:14	10:08:52	14:54:47						
11 AH231171		46/3		10:23:47	10:32:11	17:23:53	NOT RECD					
12 AH23977	are hide n to	53/N		10:28:13	10:54:02	15:01:52	15:16:47					
13 AH2214861	maintain	i 62/N		10:39:22	11:44:06	18:29:19						
14 AH226890	maintain	60/3		10:40:07	11:16:15	12:37:39	13:20:34					
15 AH223237	confidentiality	60/Fe		10:44:23	11:25:52	18:29:20						
16 AH232765		39/N		10:47:44	10:51:18	12:42:17	12:40:42					
17 AH236332 18 H64383		70/3		10:58:58	11:45:42	14:36:31 16:04:01						
18 H64383 19 AH2214125		40/X 56/Fe		10:59:51	11:42:50	10:04:01 11:24:47						
20 AH236129		32/3		11:04:58		NOT COMPLETED						
20 AH236129 21 AH229008		55/3		11:05:24	12:03:46	12:46:46						
22 AH235190		64/3		11:08:14	11:48:27	14:10:23	NOT RECD					
23 AH2216475		a 50/Fe		11:08:28	12:24:57	18:29:25	HOT KEED					
24 H38298 (E		VAT 42/Fe		11:08:45	12:53:41	15:52:39						
25 AH235063		70/3		11:09:07	12:23:36	14:23:57						
26 AH235106		52/3		11:09:26		NOT COMPLETED						
27 AH23767		55/Fe		11:09:57	12:20:32	16:00:07						
28 AH231805		r 51/A		11:10:17	12:38:59	18:29:27						

Figure 3: Ward module to manage patients at chemotherapy ward

Generate Export	Live Dashboard																
Today's Patient Journey a		Preauth V/s Approval Analysis															
Total Preauth				Pending Files for Pre-Auth/Discharge Case Wise Detail								Day Care Chemo Ward Activity					
Ilser Wise Summary			Total Discharge														
		FILE_CLO PREAUTH DISCH DIS_VER CL_UPD PREAU_UPD REGI C								· · ·							
SR USER_NAME																-	
1 DIVYA NARENDRABHAI		1			3	4	4			11						н.	
2 SHERYAR ANSARI	MTS									7	1						
3 RAHUL BHIL	MTS																
4 VIJAY CHAUHAN	MTS		**		1	**		1		44	**						
5 MANSI CHAVDA	MTS				1					16			25				
6 DIPIMALA DARJI	MTS		**		16	8	8	**			**		**		**		
7 SANDIP DAVE	MTS				11									54			
8 JAYDEEP GOHIL	MTS	11	**		1	15	15								**		
9 KHUSBU GOHIL	MTS																
10 HINA PARMAR	MTS	24	3		7				1	5				7	**		
11 BHADRESH PARMAR	MTS					16	16										
12 MINAXI PARMAR	MTS									17			23				
13 PINKI PARMAR	MTS																
14 PRIYANKA PARMAR	MTS									27							
15 SANJAY PARMAR	MTS				18	2	2			11		1	4				
16 NIMESH PATELIYA	MTS																
17 VAGHELA RIPAL	MTS				8	12	12										
18 RUCHI PATEL	MTS	-		-	11	13	13		-								
19 JYOTSNA PARJAPATI	MTS	3			15	7	7	3									
20 KULDEEP RAJPUT	MTS																
21 JIGNA RATHOD	MTS									1							
22 URVASHI RATHOD	MTS				17	5	5			27							
23 HIMANSHU V PATEL	MRO																
24 Mr. RATNAKAR SHROTR																	
25 VIJAY MORE	UD CLE																
26 JAYESH B SOLANKI	S.A.																
27 BAKULAN NINAMA	RCLER																
28 Mr. UPADHYAY KALPES	F.W.																
29 VISHRUTI PANDYA	S.A.																
30 Dr. ABHESINH K. RATHOU	HAM															- 1	

Figure 4: Central console for top line management to monitor functioning of PM-JAY scheme

Outcome of this structural change:

This software was rolled out in October 2021, to compare its effectiveness we have taken data of patients discharged under PM-JAY scheme from period of six months before and six months after intervention. On comparison we have observed that mean monthly day care patients enrolled under PM-JAY scheme were increased from 653.5 + 52.6

patients to 1590.6 + 109.8 patients. At the same time total number of discharges under PM-JAY scheme were increased from 2785.8 + 29.5 patients to 3762.6 + 65.4 patients. This software has helped to optimise GCRI PM-JAY process and made significant improvement in patient movement across different levels within the hospital.