

Launch of Diabetic Care Plan with Interactive Indicator software to Improve Patient Compliance

AUTHORS

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OBJECTIVE

- To improve patient's compliance for diabetic treatment.
- To monitor bloods such as HBA1c, albumin, creatinine, cholesterol regularly.
- To Implement diary management for timely follow up.
- To provide standardized diabetic education.

BACKGROUND

The global burden of type 2 diabetes (T2DM) is on increasing trend, particularly, in economically developing countries [1]. Epidemiological studies suggest that, without effective prevention and control programs, T2DM is likely to continue to increase globally [2, 3]. Regular clinical and biochemical monitoring of patients, adherence to treatment and counseling are keystones for prevention of complications. In order to achieve maximum results in prevention, treatment and patient education, a proper diabetic care plan is needed to develop.

PLANNING/IMPLEMENTATION METHOD

Seeing the complication of diabetes and low compliance with treatment and education of patients, it was decided to initiate an effective diabetic care plan. Initially an audit was conducted in diabetic OPD clinic to evaluate the service utilization, treatment adherence, education of patients and follow up in clinics. After the results of audit, it was planned to formally establish a diabetic care plan. Our team then created an interactive dashboard for nursing team to monitor disease indicators and to take appropriate actions in timely manner. This diabetic care plan was formally launched after the development of dashboard in June 2022.

RESULTS

Initial audit was conducted in January 2022 on 450 patients. Results showed multiple areas which needed improvement such as reminder about follow up, need for disease education and prevention of secondary complication.

After the implementation of diabetic care plan, the data is encouraging and shows significant improvement in all parameters. Currently, there are 369 patients enrolled in the diabetic care plan till date, with 189 males and female 180 having male to female ratio of 1.05.

After the implementation of diabetic care plan, the status of indicators is much upgraded as shown in table 1.

	HbA1c	Cholesterol	Creatinine	Education	Follow up adherence
Before diabetic care plan N=450	208(46.2%)	89(19.7%)	217(48.2)	0	91(20.2%)
After Diabetic care plan N=369	246(66.7%)	161(43.63%)	250(67.73%)	359(97.2%)	326(88.3%)

Table 1= Indicator details before and after implementation of diabetic care plan

Indicator sheet helped nursing team not only in monitoring of individual patient’s progress but also in overall evaluation of care plan. Color coding system helped team in demarcation of patients in high and low risk categories not only in terms of compliance but also in terms of disease progression.

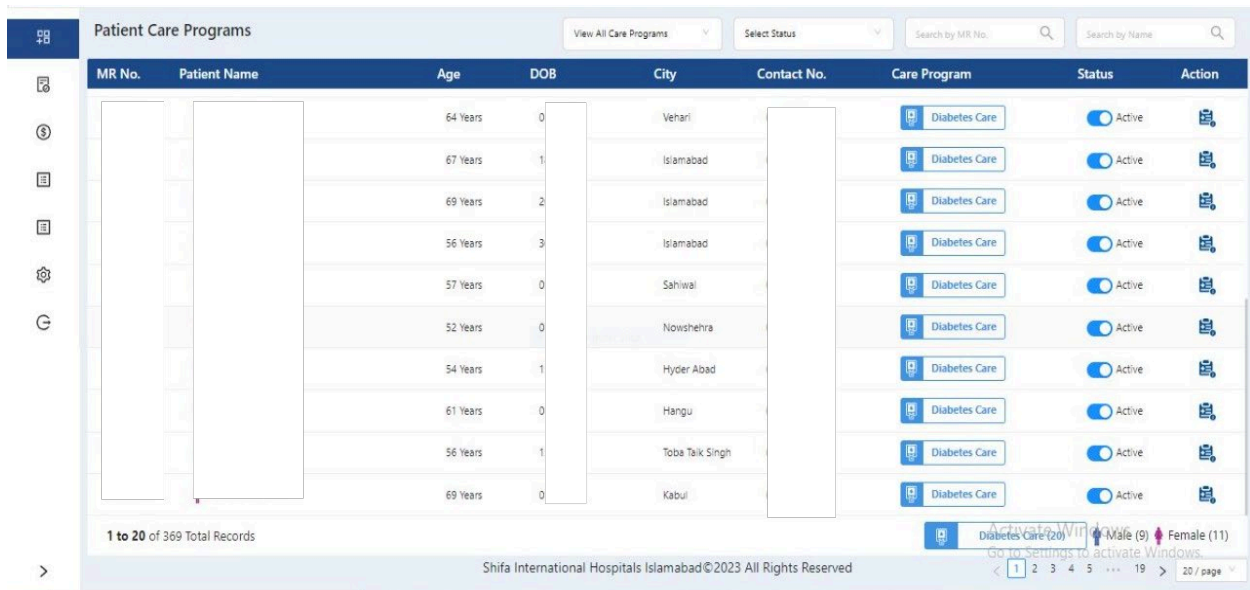


Figure 1: Diabetic care plan enrollment screen

Diabetic Indicator Sheet								
Patients								
MR No.	Patient Name	Doctor Seen	HBA1C			ACR		
			Current Value	Date Done	Due Date	Current Value	Date Done	
		-	Not Done	-	-	Not Done	-	
		-	8.30	11/04/2022	10/07/2022	Not Done	-	
		-	Not Done	-	-	Not Done	-	
		-	8.60	06/05/2022	04/08/2022	Not Done	-	
		-	7.40	04/07/2022	02/10/2022	Not Done	-	
		-	7.90	24/05/2022	22/08/2022	2.99	14/05/2022	
		-	7.10	13/04/2022	12/07/2022	Not Done	-	
		-	8.00	20/12/2022	20/03/2023	58.00	24/06/2022	
		-	9.10	18/06/2022	16/09/2022	Not Done	-	
		-	7.60	17/06/2022	15/09/2022	Not Done	-	
		-	5.80	13/07/2022	11/10/2022	Not Done	-	
		-	7.10	04/10/2022	02/01/2023	Not Done	-	
		-	12.70	05/08/2022	03/11/2022	Not Done	-	

Figure 2: Diabetic Indicator sheet

CONCLUSION

Diabetic care plan improves the process of diabetic care and patient's compliance towards treatment and education

REFERENCE

1. International Diabetes Federation IDF Diabetes Atlas. *International Diabetes Federation*. 5th. 2011. [Accessed 2012 July 15]. Available: <http://www.diabetesatlas.org/>
2. Zimmet P, Alberti KG, Shaw J. Global and societal implications of the diabetes epidemic. *Nature*. 2001;414:782–7. [[PubMed](#)] [[Google Scholar](#)]
3. Alberti KG, Zimmet P, Shaw J. International Diabetes Federation: a consensus on Type 2 diabetes prevention. *Diabetes Med*. 2007; 24:451–63. [[PubMed](#)] [[Google Scholar](#)]