Advancing Patient Outcomes for Economically Vulnerable Patients: Approaches, Learnings from a Large Health System's Program

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Disclosures

- **We have no actual or potential conflicts of interests in relation to this presentation.**
- **We have the permission of each patient/representative of each case to share their story.**
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Objectives

- Recognize the barriers and drivers of behavioral change for the underserved on medication adherence
- Gain insights that can applied toward similar hospital systems with outcome-driven objectives
- Realize ways in which pharmacists can serve in identifying underserved patients who need enhanced support and services
- Reflect on how integrative healthcare teams and individual roles can facilitate positive outcomes not just for the patient but also for the healthcare team

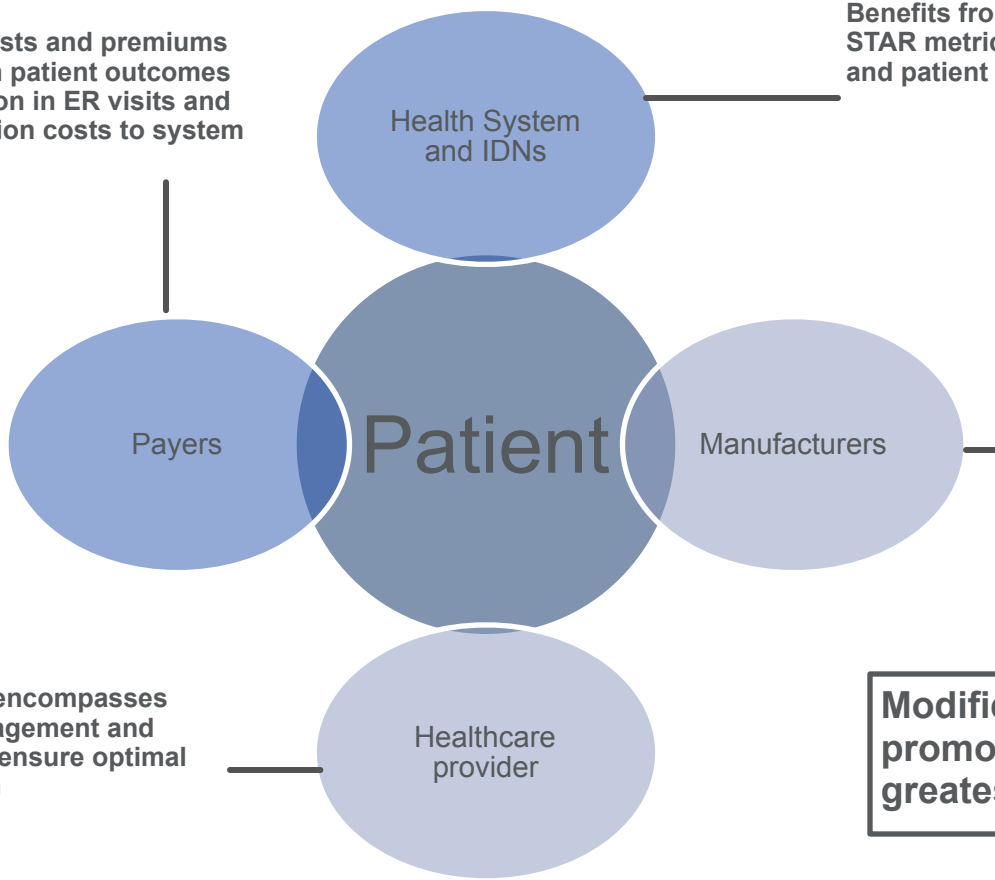
Citations: (1) DiMatteo MR. Social support and patient adherence to medical treatment: a meta-analysis. Health Psychol. 2004 Mar;23(2):207–18. Referencing DiMatteo, MR (1994) Enhancing patient adherence to medical recommendations. Journal of the American Medical Association, 271, 79-83; DiMatteo MR (2000). Practitioner-family-patient communication in pediatric adherence: Implications for research and clinical practice. In D. Drotar (Ed) Promoting adherence to medical treatment in childhood chronic illness: Concepts, methods, and interventions, pp. 237-258, Mahwah, NJ: Erlbaum. Dunbar-Jacob J & Schlenk E (2001) Patient adherence in treatment regimen. In A. Baum, T.A. Revenson & JE Singler (Eds) Handbook of health psychology pp 571-580, Mahwah, NJ: Earlbaum. (2) Patel NU, Moore BA, Craver RF, Feldman SR. Ethical considerations in adherence research. Patient preference and adherence. 2016;10:2429-2435. doi:10.2147/PPA.S117802. Citing Balkrishnan R, Carroll CL, Camacho FT, Feldman SR. Electronic monitoring of medication adherence in skin disease: results of a pilot study. J Am Acad Dermatol. 2003; 49(4): 651-654. (3)"Patient Medication Adherence: The Next Act, " Health Affairs Blog, December 19, 2011

What is a positive outcome?

- Process can be a positive outcome
- Opening new doors and options can be a positive outcome even if it fails
- Utilizing levers to processes that optimize ethics, improve morale, and promote the financial health and reputation of the hospital/ system while improving social determinants of health

Citations: Jonsen AR, Siegler M, Winslade WJ. Clinical Ethics: A Practical Approach to Ethical Decisions in Clinical Medicine. 7th ed. New York, NY: McGraw Hill; 2010:1.

What Is the Ethical Obligation to the Financially Challenged Patient?



Modified deontological view to promote health for those in greatest distress

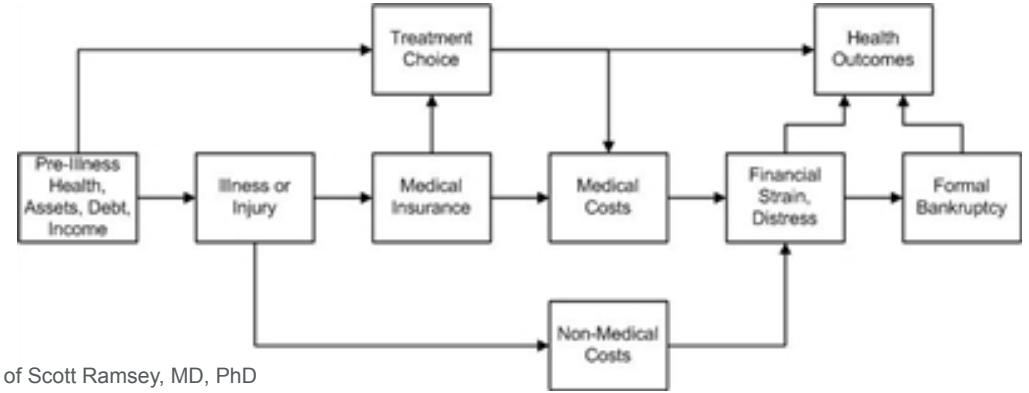
Patients with Financial Challenges Represent a Particularly Vulnerable Population—Oncology Analog

Increased cost containment and management strategies by payers trickle to poor or limited access for patients with cancer

- Range of tools include restricting to FDA label, quantity limits, step edits, reauthorizations, and pathways of care

Patient out-of-pocket costs impact health outcomes

- **$1,107** annually for adults (vs $617 for those without a cancer history)
- **4.3%** of cancer survivors report high out-of-pocket burden vs 3.4% without a cancer history.



Courtesy of Scott Ramsey, MD, PhD

Interplay between cancer and financial distress

Source: Kaiser Permanente; Guy GP Jr, Ekwueme DU, Yabroff KR, et al.: J Clin Oncol 31 (30): 3749-57, 2013; Guy GP Jr, Yabroff KR, Ekwueme DU, et al.: Am J Prev Med 49 (6 Suppl 5): S489-97, 2015; Runyon A, et al. J Manag Care Spec Pharm. 2019;25(2):272-8

Ethical Barriers to Achieving Adherence to Treatment

Homogeneous approach

- One-size-fits-all approach fails to account for individual needs, thus compromising intended benefit of adherence monitoring

Misinformed/uniformed communication plan

- Patients are not always informed of challenges and risk of non-compliance, restricting their right to information and option to decline or enroll in patient support or adherence programs

Poor/lack of access to therapy

- Despite data that supports interventions that may reduce financial burden and optimize oral chemotherapy adherence, cost containment strategies by payers and health plans pose a threat to affordability and add to existing financial burden

Source: Patel NU et al. Patient Prefer Adherence. 2016; 10: 2429–2435; Amininasab SS, et al. J Med Ethics Hist Med. 2017; 10: 5.

Duty to Care Does Not Stop at Treatment

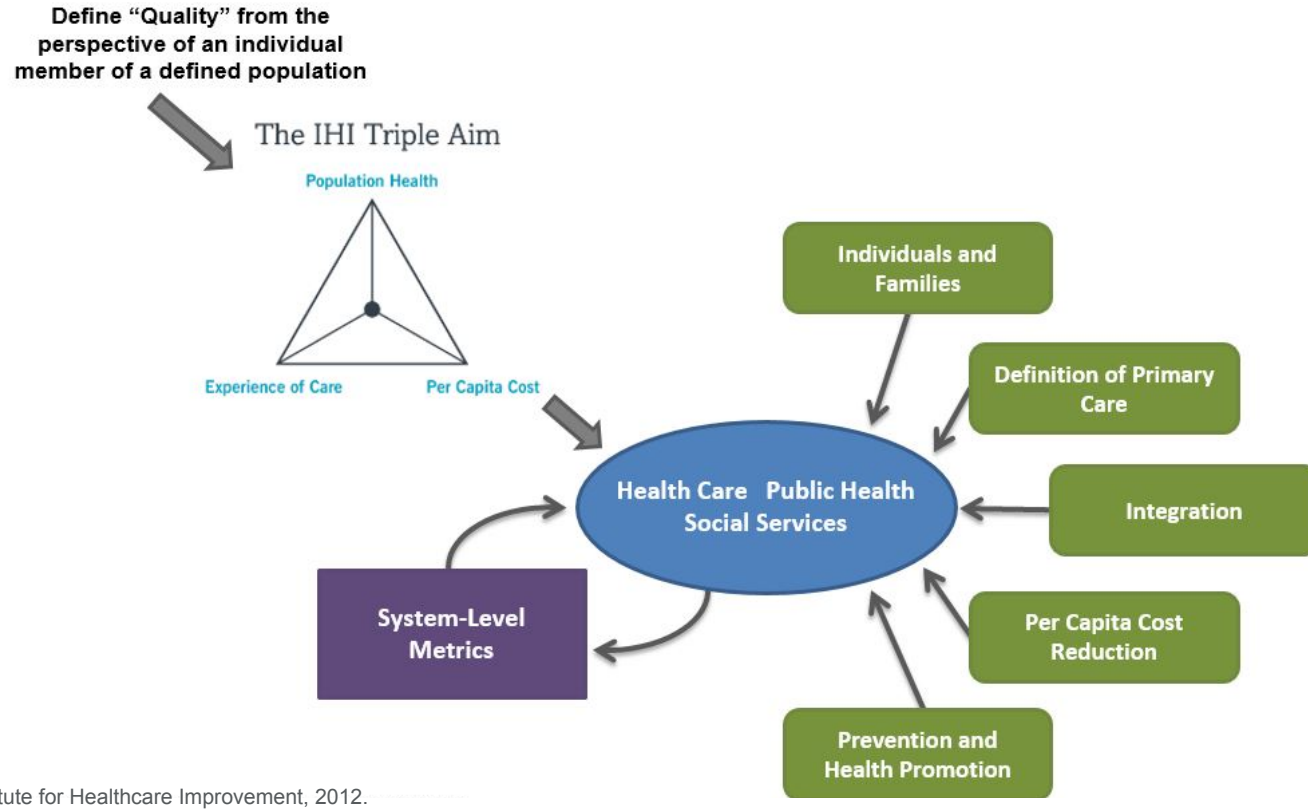
1. Duty to provide optimal care aligns with Hippocratic Oath to do no harm and to act with a good intention
2. Hospitals benefit from Good Samaritan protection for care and compassion in providing medical services
3. Outcome and measurable impact on overall health, including adherence, must be incorporated into model

"[E]thical issues are imbedded in every clinical encounter between patients and caregivers because the care of patients always involves both technical and moral considerations."
– AR Jonsen et al.
Clinical Ethics: A Practical Approach to Ethical Decisions in Clinical Medicine

Ethical Arguments
Duty and Rights - Taking the Right Action
Character and Relationships - Being Good Persons
Consequences - Predicting the best possible outcome

Source: American Nursing Society

Health Systems Have a Clinical, Financial, and Ethical Obligation in Ensuring Patient Satisfaction



Source: Institute for Healthcare Improvement, 2012.

Perceived Respect and Dignity May Improve Adherence

- In a study with patients with heart failure that measured level of dignity; mean score of medication adherence was 5.82
- Suggests low medication adherence among the patients compared; mean score of human dignity as a factor was 81.39.

Table 2. Mean and standard deviation and correlation between medication adherence and human dignity, and the factors threatening it

Variable	Questionnaire Range	Obtained Range	Mean	SD	Correlation Coefficient (r)	*P*-Value
Human Dignity and its Dimensions	25 - 125	37 - 125	81.39	16.52	- 0.66	< 0.001
Distress Symptoms	6 - 30	8 - 30	19.06	4.21	- 0.65	< 0.001
Peace of Mind	3 - 15	4 - 15	9.38	2.32	- 0.61	< 0.001
Dependency	4 - 20	6 - 20	14.37	2.38	- 0.66	< 0.001
Social Support	5 - 25	5 - 25	14.95	3.45	- 0.62	< 0.001
Existential Distress	7 - 35	11 - 35	23.62	5.03	- 0.60	< 0.001

Poor patient dignity is negatively correlated with adherence to treatment

Source: Amininasab SS, et al. J Med Ethics Hist Med, 2017, 10:5

Patient Satisfaction and Adherence Rates Are Correlated In Cancer Care

Patients with "reported" increased treatment satisfaction and reduced burden to others resulted in greater adherence to oral chemotherapy.

- 89.3% compliant with prescribed oral chemotherapy over 12 weeks
- Correlation of increased adherence with improvement in patient symptom distress, quality of life, satisfaction with clinician communication and treatment, and perceived burden to others

Table 2. Linear Regression Model: Change in Symptom Distress, Depressive Symptoms, Quality of Life, Worry Burden, and Treatment Satisfaction Affects Adherence With MEMSCaps

	Adherence			
	Unstandardized		Standardized	
Variable	B	95% CI	β	*P*
Δ Symptom distress (SDS)	−0.36	−1.05 to 0.33	−0.13	.30
Δ Depressive symptoms (HADS)	−0.91	−2.30 to 0.49	−0.16	.20
Δ Quality of life (FACT-G)	0.11	−0.50 to 0.28	0.08	.59
Δ Perceived burden (CWI-burden)	−0.92	−1.76 to −0.09	−0.23	.03
Δ Treatment satisfaction (FACIT-TS-PS)	0.71	0.48 to 0.94	0.56	< .001
Total model				
Adjusted R^2		0.41		
F		11.14 (5, 67)		
P		< .001		

NOTE. Negative scores indicate a reduction (ie, decrease in symptom distress, depressive symptoms, perceived burden) for every one unit increase in adherence. Abbreviations: Δ, change; CWI, Cancer Worry Inventory; FACIT-TS-PS, Functional Assessment of Chronic Illness Therapy–Treatment Satisfaction–Patient Satisfaction; FACT-G, Functional Assessment of Cancer Therapy–General; HADS, Hospital Anxiety and Depression Scale; MEMS, Medication Event Monitoring System; SDS, Symptom Distress Scale.

Improvement in adherence can further lead to achieving measurable health outcomes and reduction in hospitalization.

Source: Jacobs JM et al. Journal of Oncology Practice 2017 13:5, e474-e485

Practical and Ethical Considerations for Overcoming Financial Barriers of Adherence

Providers and patients should engage in shared decision making after full disclosure of adherence challenges and expectations

- Provider staff should be trained on health economics and navigating access barriers
- Staff should be aware of range of low-cost alternatives and relative prices and out-of-pocket expenses and affordability with treatment options
- Patient and provider should disclose related costs and time impact (travel, absenteeism, work productivity, family obligations)

Framework for ethical approach to engaging patients with financial burdens toward adherence goals

Source: Nipp RD, et al. American Society of Clinical Oncology Educational Book 2018 :38, 524-531

Medical Legal Partnership (MLP)

- These cases are from Centura Health (17 hospital system across Colorado and Western Kansas) where the first corporate level in house bioethics program was developed
  - 160 cases in year 1 prior full expansions with over $2M cost avoidance and on track for over over $4M following fiscal year
- Scaling Case Management/Social Work to innovative applications of interventions including legal tools
- I-HELP
  - Income/Insurance
  - Housing/Homelessness
  - Education/Employment
  - Legal Status
  - Personal Dynamics

Case 1: adherence and housing, disability, a/o employment

Summit County

Mid 40s female

Evicted from her apartment in the mountains during high season

Non-adherent with cancer treatments

Jefferson County

Mid 30s male

Child needing disability diagnosis and accommodations in school

Non-adherent with dialysis

Mesa County

20s male

Non-adherent b/c of fear of job loss and caring for disabled family member

Case 2: homeless and disabilities

- Combination of Denver and Adams County
- Homeless mother (50s-60s) and son (20s-30s), high utilizers, mother not adherent post-hospitalizations
- Adult age son clearly cognitively delayed

"Helmets and chin straps were provided to patients as part of the decreased hospital length-of-stay initiative."

Case 3: dementia, established residency complications, long length of stays

Adams County, relocated from California
70-80 yo female
Bank accounts and other assets still tied up in CA with "ex"-boyfriend
Sister and husband willing to serve as guardians and needed special conservator (unwilling to serve as conservator)
—-
Denver County
40s/50s male
Question of capacity
Family out of state, father passes away during process
Sisters agree to be co-guardians and conservators

Case 4: pediatric patient stuck in adult ed

Douglas County

Minor, ward of the state

In between case workers and unable to secure placement

Engaged in self-harm behavior

Case 5: the volatile, noncompliant patient with predatory relationships

Arapahoe and Denver counties
30-40s year old male
Lacks decision making capacity
Volatile
Predatory friendships
Estranged with Mother and Sister
Needed toe amputation

Case 6: TBI, criminal history, housing

El Paso
50-60 male

- **Serving time for sexually assaulting daughter, wife divorced him after found guilty but remain on good terms but unable to provide in person services/ support as daughter has a minor child (unrelated)**
- **Was hit by a car after sentencing and was unable to fulfill requirement of work housing probation program**
- **Dumped by legal system in hospital unable to be discharged due to no where to go and dishonorable discharge from air force after sentence**
- **Family out of state willing to rent an apartment for him to live in with one of them (their residence is in a school zone) but needs permission to leave state lines**

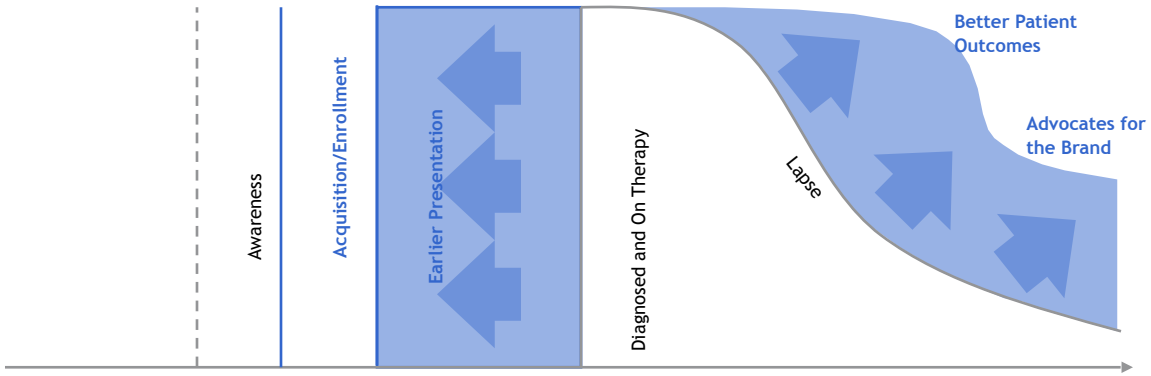
Guiding Principles for Adherence Programs in Underserved and Vulnerable Populations

- Ensure that content is created using Health Literacy Guidelines
- Cultural Competency including Language and Culturally Relevant Content is Critical
- Building a Trusting and Support Structure will help increase confidence of patients
- Behavior Modification Techniques have been proven to help overcome the to help increase medication adherence
- Pharmacists and other HCP (Health Care Professionals) play a critical role in on-boarding and serving underserved patients with focused support and services

Getting Underserved Patients Diagnosed Earlier and Supporting Them Will Ensure Better Health Outcomes

By creating supporting relationships, Patient Support Programs are uniquely able to help vulnerable patients :

- Engage prospects and ensure that they see a Specialist and get on Treatment sooner
- Provide a bridge to adherence through the critical “early engagement” stage to drive better Patient Outcomes



Case Study #1:

On-Boarding Patients and Supporting Them Through a Behavior Modification Program

Mapping the Messaging, Contact, and Communication Channels Based on the ***Activation, Changing, Review, and Maintenance (ACRM) Behavior Modification Approach***

Pharma Company Situation

- Leading global biologic product in immunology
- A Patient Support Program (PSP) with basic interventions was developed
- The program needed to evolve to use more sophisticated segmentation and behavior modification approach
- A planning and measurement solution was also needed to optimize the program
- Client needed a company to plan, design, and oversee the deployment and training of countries on the solution

Solution

- Developed the messaging, contact, and channel strategy
- Developed a data collection plan and measurement/ reporting platform
- Integrated home delivered testing and monitoring into program
- Working on a more digital technology approach for optimal global deployment
- Currently 250,000 patients enrolled globally (ex-US)
- Program demonstrated an increase in days of therapy by 20%*

*Results based on data analysis in one affiliate able to analyze anonymous patient data.

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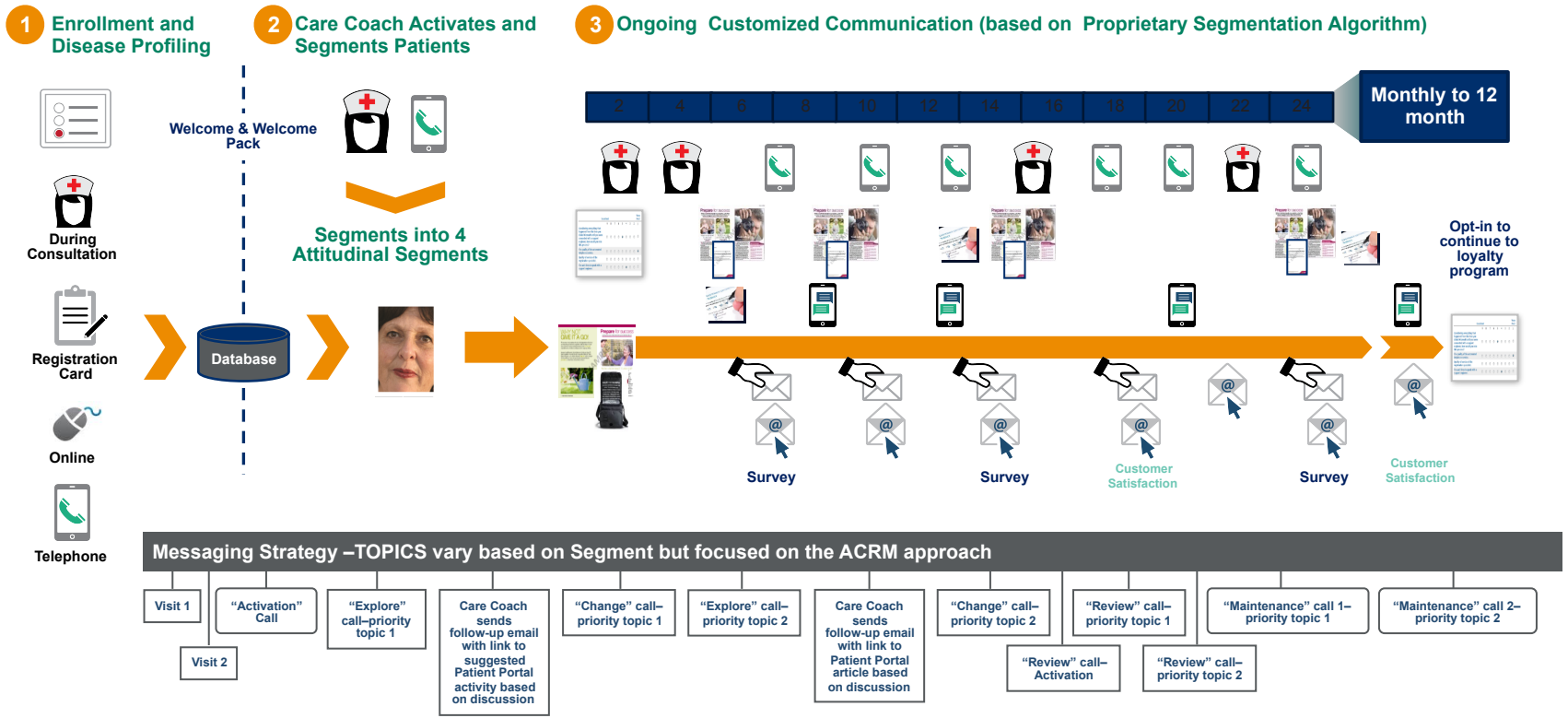
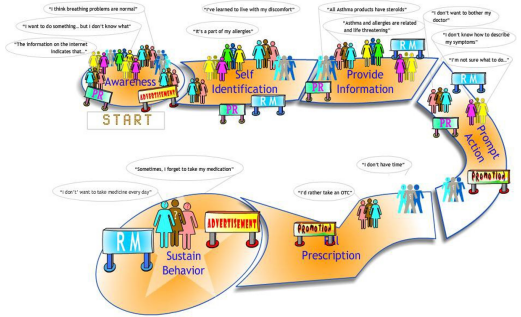


Case Study 2- Finding and Maintaining Vulneralbe Patients with Hemophilia

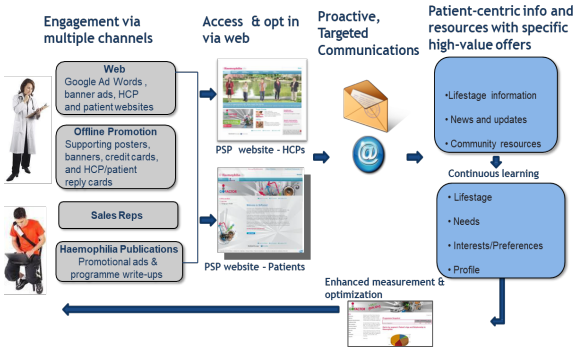
Client Situation

- US-based company marketing Hemophilia A and B products
- The Team had developed a robust adherence and loyalty program
- The Global Team wanted to leverage the US creative assets to launch version in vulnerable patients in Europe
- It needed overall adherence program elements, including messaging and measurement



Solution

- We developed the overall adherence approach and launch plan
- Leveraged the global database and reporting platform
- Worked to increase positive patient outcomes through this Unbranded Patient Support Program



Category	Metric Objective
Registration Rate	1) Patient &HCP 2) Obtain registration target number
Engagement	1) Drive visitors to programme website 2) Monitor e-communications read 3) Establish survey completion
Disease Management	1) Measure change in utilization 2) Confirm increase treatment regimen discussion (HCP - Patient) 3) Showcase improved condition management (result of programme)
Satisfaction	1)Positive perception of programme & recommend to a friend 2) HCP programme feedback 3) Positive programme ratings

Summary and Conclusions

- Barriers could be overcome and behaviors changed to help increase medication adherence
- Hospital systems need to better understand the key drivers of better patient outcomes
- Pharmacists play a critical role in on-boarding and serving underserved patients with focused support and services
- Integrative healthcare teams can also facilitate positive outcomes