A Performance Measurement Plan for Home Telehealth

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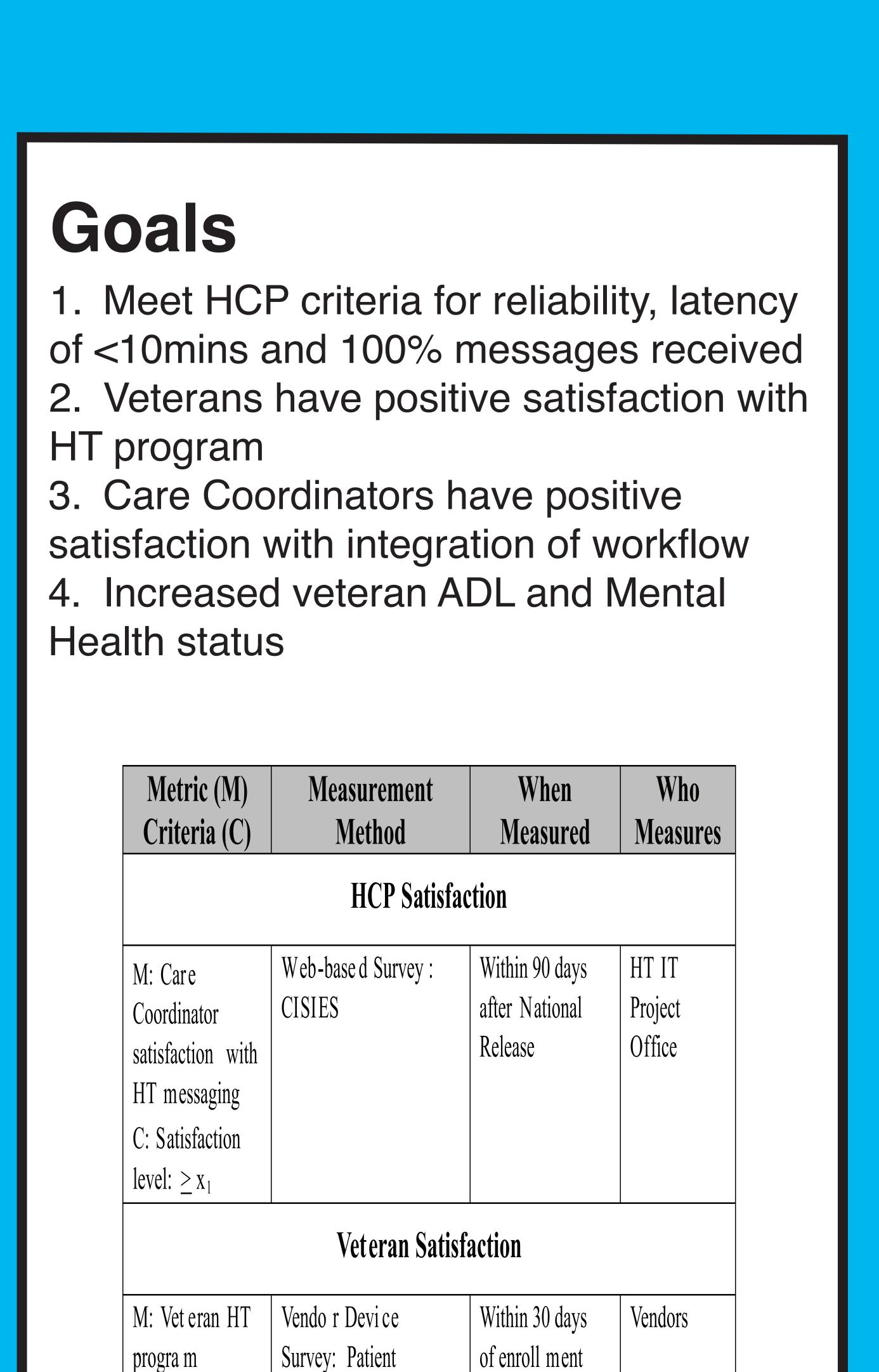
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Abstract

This poster presents technology and people measures used in a Performance Measurement Plan evaluating Home Telehealth Information Technology (HT IT) Project Office support of a national Care Coordination Home Telehealth (CCHT) program. Performance of the HL7 messaging system is measured in terms of reliability, a two week moving average of latency, network response time, and failover performance. The HT IT Project Office validates vendor reported data for use in monitoring activity by modality and average daily census to ensure completeness and accuracy. The "people measures" of satisfaction and health status of veterans enrolled in the Home Telehealth program, and satisfaction of care coordinators with the implementation of this system, are measured by surveys.

The problem addressed is how to evaluate HT IT Project Office support of a national CCHT program. The HT IT project integrates, through HL7 messaging, numerous clinical information systems (VistA Computerized Patient Record System (CPRS), VistA Patient Information Management System (PIMS), Master Patient Index (MPI), Health Data Repository (HDR), and VistAWeb) with six Home Telehealth vendor systems. This project uses HL7 messages to move clinical data between these systems, integrating the view of HT data with other sources of clinical data. The HT IT Project provides validated vendor reported data, so Care Coordinators can see HT monitoring activity reports, census data, and survey data. The HT IT project provides quarterly HT survey data on veteran satisfaction with the HT program and veteran activities of daily living and mental health status to Care Coordinators. The goal is to provide, at the time it is needed, data necessary to make informed healthcare decisions.

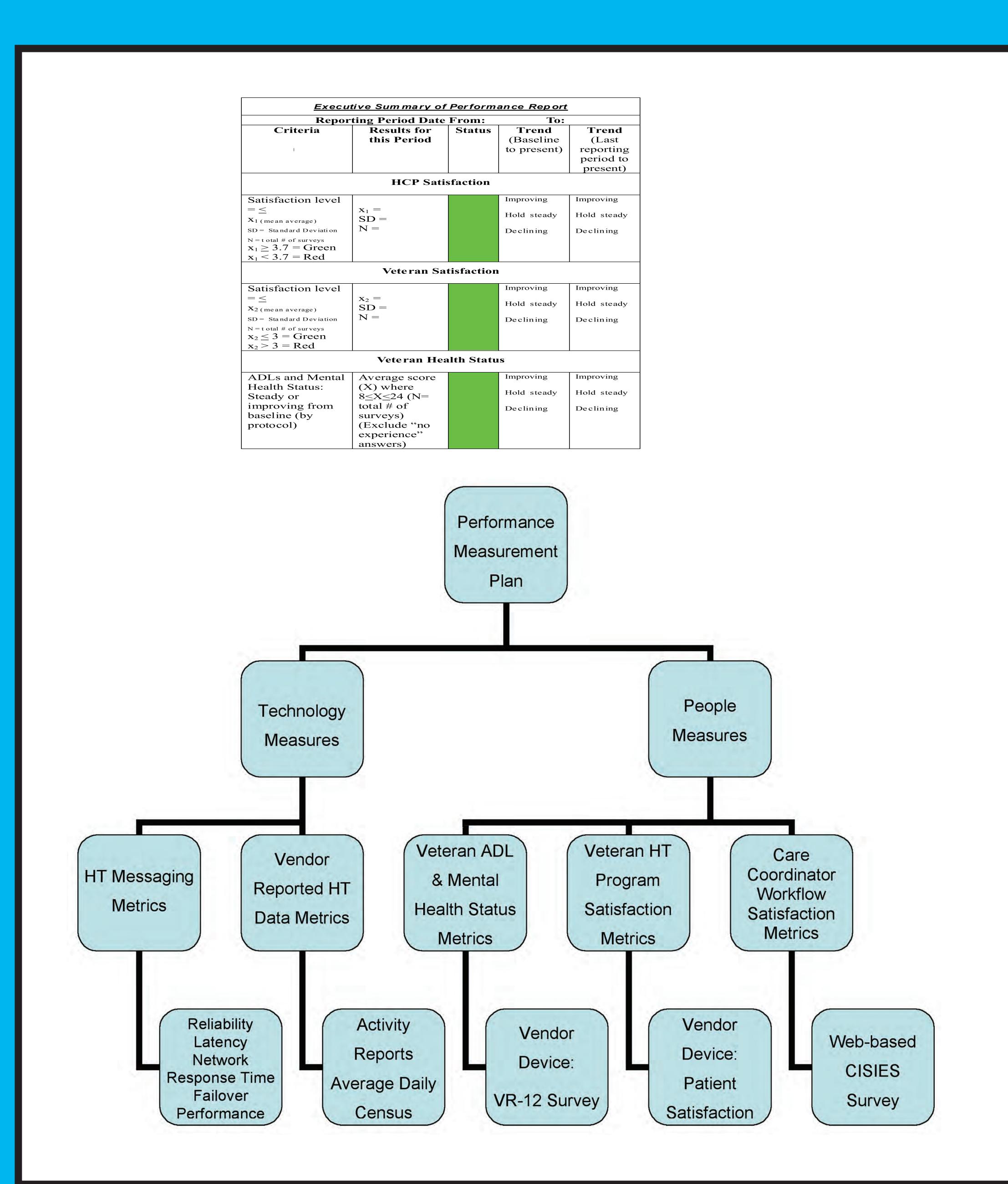
A Performance Measurement Plan is essential for assessing effectiveness of support provided to healthcare clinical providers (HCPs) and care coordination staff in delivering home telehealth services. This evaluation provides the basis for determining whether to proceed with a national rollout, and once the implementation is complete, determining what changes should be made to improve the flow and usefulness of home telehealth data.



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Living Health Status days there after

to the program



Metric (M) Description (D) Criteria (C)	Measurement Method	When Measured How Reported	Who Measures		
Technical Measures					
M: Latency of Message Transmission D: Transit time for HL7 message: From vendor device to HDR.	Monitor HL7 messages: Time from initiation of vendor message to final destination in HDR	Weekly Report: HT Weekly Manager's meeting. Report posted on HT IT Project Web site: http://vaww.va.gov/techsvc/projects/HomeTelehealth_status.html	HT IT Project Office		
C: Clinicians can view 100% of HT data in VistA within 10 minutes of patient submission.					
C: Two-week moving average <10 minutes. M: Network Response Time	Real-time monitor and map shows	Updated every 5 minutes Map available at	HT IT Project Office		
D: Response time between vendors and facilities C: Does not time out	current response time between vendor's servers and facilities.	http://vaww.etech.med.va.gov/networkstatus/			

Metric (M) Description (D) Criteria (C)	Measurement Method	When Measured How Reported	Who Measures
	Vendor Report of Enro)llment Data	
M: All patients using HT devices	Vendor sends HL7 message containing XML format data on patients and	Weekly Activity Reporting	Vendors report data
D: Total number of enrolled patients and modalities used at end of each reporting period	modalities to HT IT Project database. On demand, database generates report of enrolled patients by modality.	database at: https://vaww.etech. med.va.gov/teleheal th/	HT IT Project Office validates reported data
C: Each vendor accurately reports enrolled patients and modalities each reporting period			