

Telemedicine at SF DPH

Brief Overview
2010–2011

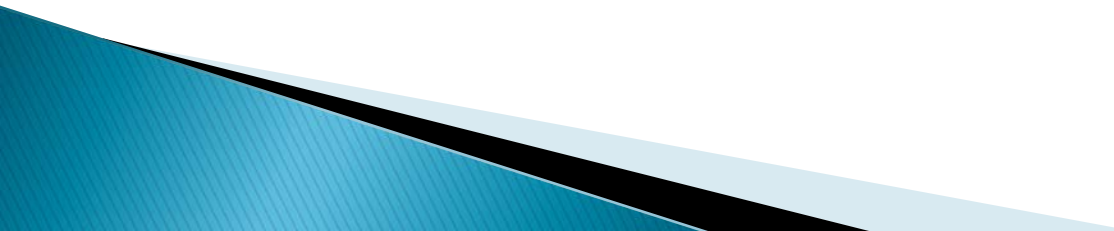
SF DPH / UCSF Collaboration

- ▶ Planning for a shared system of telemedicine has been underway since Spring of 2007
- ▶ The centerpiece of the vision is focused at SF DPH – utilizing an ‘urban telemedicine’ model with SFGH based specialties linked to ‘safety net’ primary care venues – starting with COPC clinics, then extending to Consortium clinics

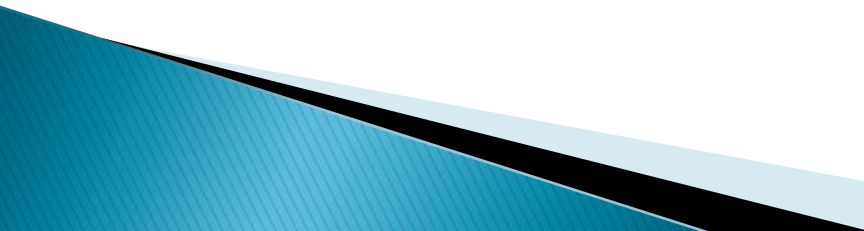
Primary Vehicle for the Joint Planning Effort

- ▶ A joint SF DPH / UCSF Telemedicine Workgroup has centered the planning efforts – Chaired by Roland Pickens and Hal Yee
- ▶ Workgroup has met on a monthly basis for about three years
- ▶ Represented in the Workgroup:
 - UCSF staff assigned to the 1D Telemedicine Project
 - DPH Administration
 - DPH IT
 - SF Dept. of Technology
 - Representatives from Specialty Services – Ophthalmology, Psychiatry and Dermatology

Bandwidth Infrastructure and Equipment

- ▶ Made possible through Proposition 1D funds (2007) in collaboration with UCSF:
 - ▶ Dark Fiberoptic connectivity linking
 - SFHG
 - LLH
 - 1380 Howard
 - COPC Health Centers
 - Adult and Juvenile Jail Clinics
 - ▶ Completion of wiring in the M Suite at SFGH
 - ▶ Estimated value > \$600k
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Telemedicine Equipment

- ▶ Multi-feed video carts (with peripherals) linking specialty services at SFGH to COPC and primary care clinics at SFGH, as well as LHH and Jail clinics
 - ▶ Store and Forward capabilities, along with image linkage back to the EMR
 - ▶ Video equipment to support completion of behavioral health integration to primary care
 - ▶ Video equipment to complete access to remote interpreter services throughout the DPH
 - ▶ Diabetic retinal cameras and tonometers for DPH managed primary care clinics
 - ▶ Carr Auditorium and 10 conference rooms at SFGH equipped for teleconferencing
 - ▶ Estimated value > \$4M
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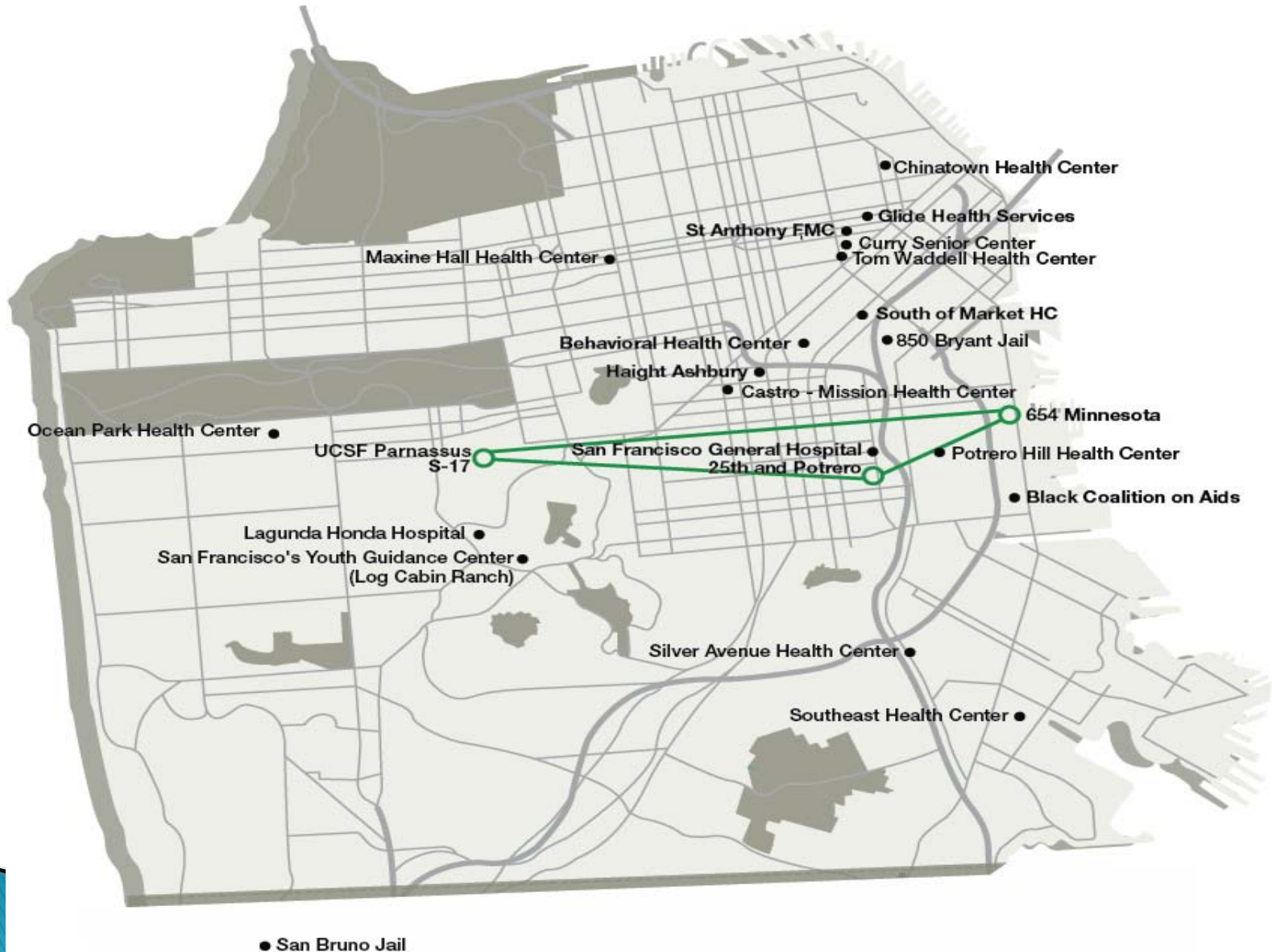
Equipment



Call Routing HUB

- ▶ UCSF is taking great pains to design a robust Call Routing HUB that will allow for optimum real-time video transmissions:
 - Between SFGH and the rest of the DPH managed system
 - Between SFGH and Consortium Clinics
 - Between SFGH and UCSF
- ▶ The HUB will also have the capacity to link to the statewide California TeleHealth Network

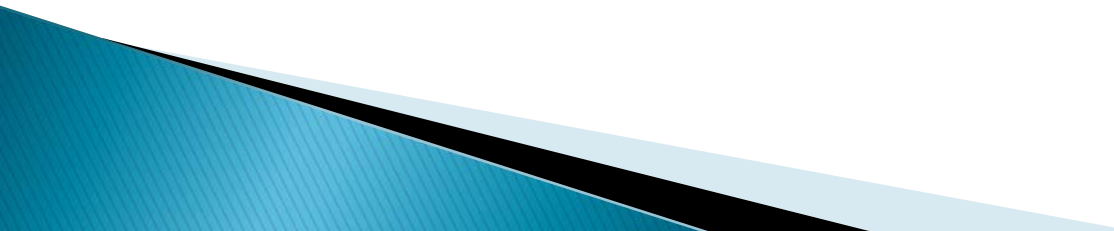
SF Endpoints & Hubs



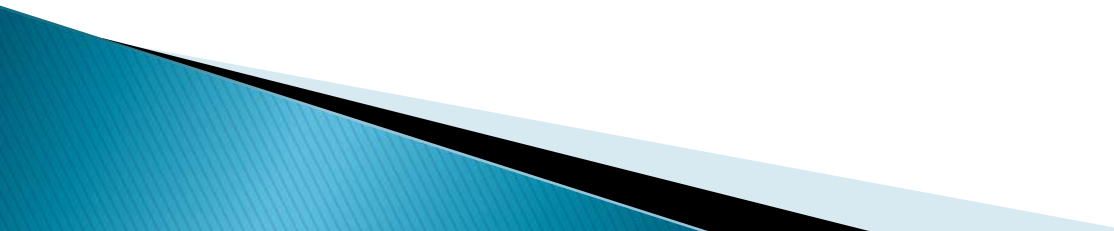
Current Challenge

Plan and Implement Initial Clinical applications to be built on this telemedicine infrastructure

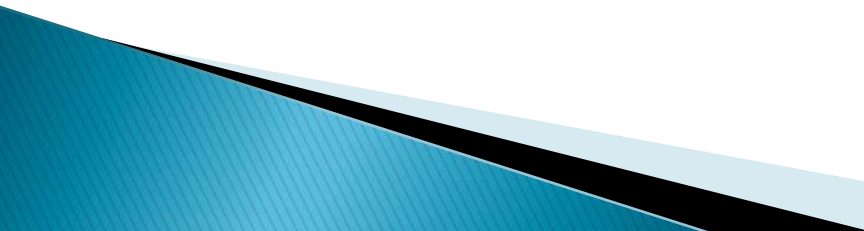
Guiding Planning Principles

- ▶ Each clinical application should hold the promise for significant practice improvement
 - ▶ Each telemedicine project should be designed to ‘scale’ to include the SF DPH managed system – and beyond that, be accessible to the SF Consortium clinics
 - ▶ Each project needs to calculate the human resources necessary to sustain the project ‘at scale’
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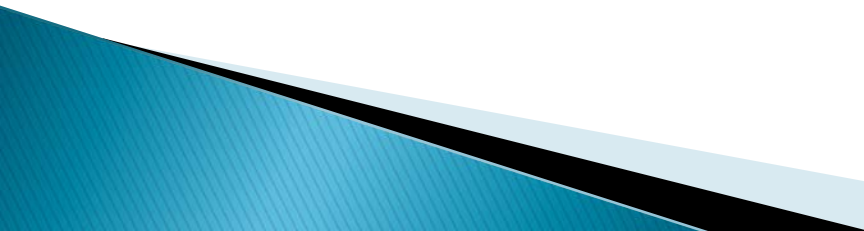
Stage one: Telemedicine Projects

- ▶ Over the next two years the following projects will be launched and brought to scale:
 - Diabetic Retinopathy screenings
 - Tele-psychiatry
 - Remote Interpreter Services
 - Tele-dermatology
 - ▶ Two are ‘store and forward’ technologies (Retinopathy and Dermatology)
 - ▶ Two are ‘real time’ video technologies (Psychiatry and Interpreter Services)
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eReferral

- ▶ The telemedicine plans include building upon the demonstrated efficiencies associated with the eReferral in terms of improved access to specialty care
 - ▶ Each new telemedicine project will either initiate (or review its current) use of e-Referral as the first step in accessing telemedicine
 - ▶ SF DPH is expected to account for the bulk volume of telemedicine encounters, especially in the early stages -- UCSF is actively investigating 'scheduling solutions' that can be utilized by the whole system
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Associated Initiatives

- ▶ Workgroups are being formed to address the following issues related to building the telemedicine system:
 - To seek funding support for the operational requirements of launching telemedicine – centered by the SFGH Foundation
 - To optimize billing / revenue potential for telemedicine services
 - To identify the necessary IT support (in cooperation with UCSF) for the management and maintenance of the telemedicine HUB and related equipment
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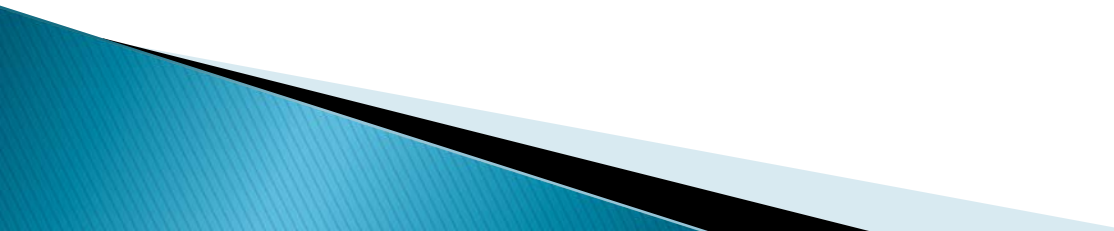
Approximate Timeline

	Q 4 2010	Q 1 2011	Q 2 2011	Q 3 2011	Q 4 2011	Q 1 2012	Q 2 2012
Infrastructure							
Dark Fiber linking all parts of DPH			June				
Call Routing HUB			June				
Carr Aud. / non OSHPD SFGH Campus							
M Wing / Main Hospital Conf. Rooms							
Clinical Applications							
Tele-psychiatry	Pilot						
Diabetic Retinopathy				Pilot			
Tele-dermatology			Pilot				
Video Interpretation	Pilot						
Planning for Stage Two Clinical Appl.							

Future Promise

Anticipate both new service models and IT infrastructures that will be required by the Health Care Reform Initiative

New Ways to Design Clinical Care Services

- ▶ Optimize technologies to increase access to Specialty Care
 - ▶ Develop cost saving delivery models that will be financially 'rewarded' in Health Care Reform
 - ▶ Marshall scarce resources through innovative, effective and efficient modes of providing care
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Develop a comprehensive HIT infrastructure

- ▶ Design (in cooperation with UCSF) a ‘state of the art’ urban telemedicine IT infrastructure
 - ▶ Optimize ‘remote access’ potentials through integration of:
 - EMRs
 - eReferral
 - Store and forward capabilities
 - ‘real time’ video linkages
 - ‘seamless’ scheduling and call routing
 - ▶ Develop a reliable system to maintain and service the HIT infrastructure
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