

# Patient Support Corps: Students Using Digital Technologies to Educate Patients



**Jeff Belkora, PhD – [jeff.belkora@ucsf.edu](mailto:jeff.belkora@ucsf.edu)**

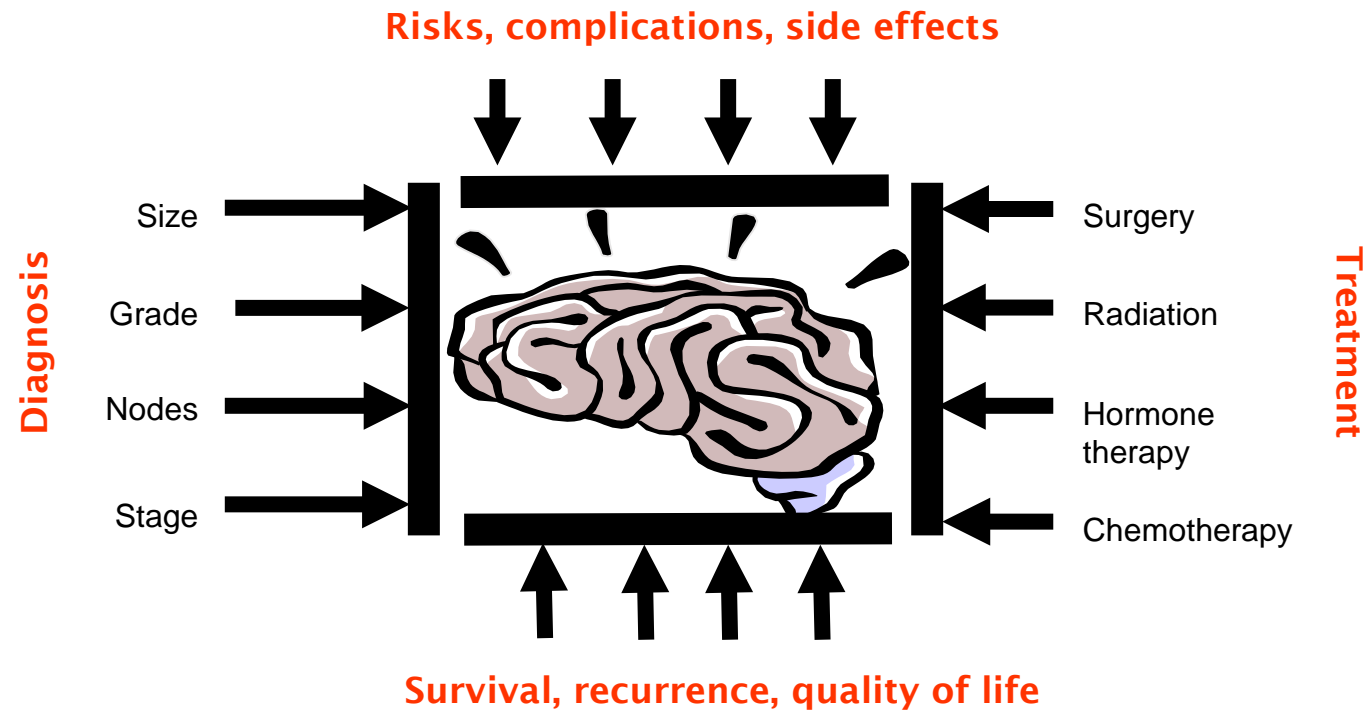
**Tia Weinberg – [tia.weinberg@ucsf.edu](mailto:tia.weinberg@ucsf.edu)**



UCSF Institute for Health Policy Studies

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## This is your brain on... **medical decisions**



## Information needs of patients

At diagnosis: “Too much, too little, conflicting **information**”

During visit: “Forgot to ask **questions** keeping me awake”

After visit: “It went **in one ear and out the other**”

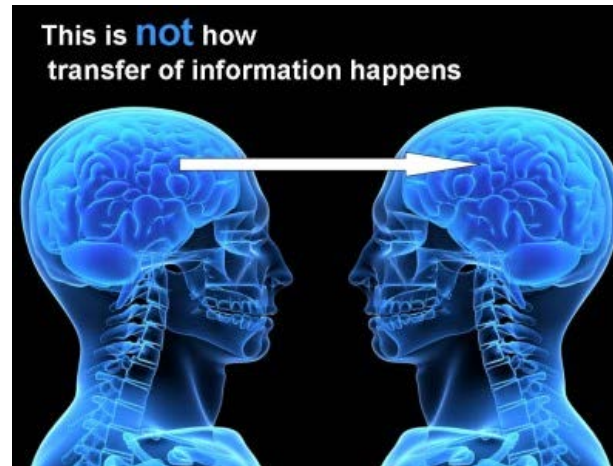
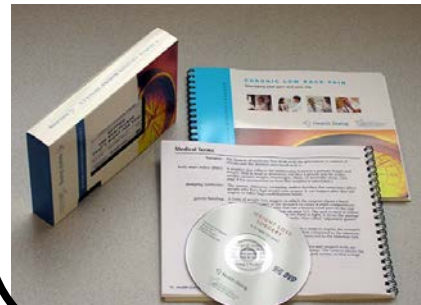


Image courtesy of [www.speakingaboutpresenting.com](http://www.speakingaboutpresenting.com)

## Decision and communication aids address **needs**

Reviewing **decision aids** increases **knowledge** (1)



**Question-listing** increases **question-asking** (2)



**Summaries & recordings** increase **information recall** (3)



**Informed and involved patients have better outcomes** (4)

- (1) Stacey et al: Decision aids.... Cochrane Syst Rev, 2014
- (2) Kinnersley et al: Interventions before consultations .... Cochrane Syst Rev, 2007.
- (3) Pitkethly et al: Recordings or summaries of consultations ... Cochrane Syst Rev, 2008.
- (4) Griffin et al: Effect on health-related outcomes of interventions. Ann Fam Med, 2004. 2(6)

*Problem* → *Solution* → *Technology*

5

Who can deliver  
decision and communication aids  
at UCSF?

## Solution: student service learning program?



## Patient Support Corps – Strategic Direction

- Purpose
  - Patients are informed and involved in their treatment decisions.
- Vision
  - All patients have the support they need to be informed and involved.
- Mission
  - Provide **students and other volunteers** to assist patients.

**2018:**  
32 interns  
2,226 visitors  
3,628 service units  
54 provider units  
9.8 satisfaction



*Problem* → *Solution* → *Technology*

8

**Alexandra Teng** presenting at Mayo Clinic





## Process of decision support



## Question-listing checklist and audio clip

### PAST (clarifying diagnosis)

- “The first item on my checklist is Past. This refers to clarifying your **diagnosis**. You’ve already mentioned a few issues in this area. For example, you mentioned X related to your diagnosis (give an example). (Or: we haven’t discussed this yet.) Anything else you haven’t mentioned yet on this topic of diagnosis?”

### PRESENT (clarifying which treatments are presently available)

- “The second item on my checklist is Present. This refers to which **clarifying which treatments** are presently available to you. You’ve already mentioned a few things in this area. For example, you mentioned X treatment that is under consideration. (Or: we haven’t discussed this yet.) Any other treatments under consideration that you haven’t mentioned yet?”

### FUTURE (clarifying future impact of treatment options)

- “The last item on my checklist is Future. This refers to clarifying the **future impact of treatments**. You’ve already mentioned a few concerns. For example, you’ve mentioned X concern on this topic. (Or: we haven’t discussed this yet.) Any other **concerns about treatments** that you haven’t mentioned yet?” [for example the advantages/benefits or risks/harms of treatments.]



## Question-listing excerpt

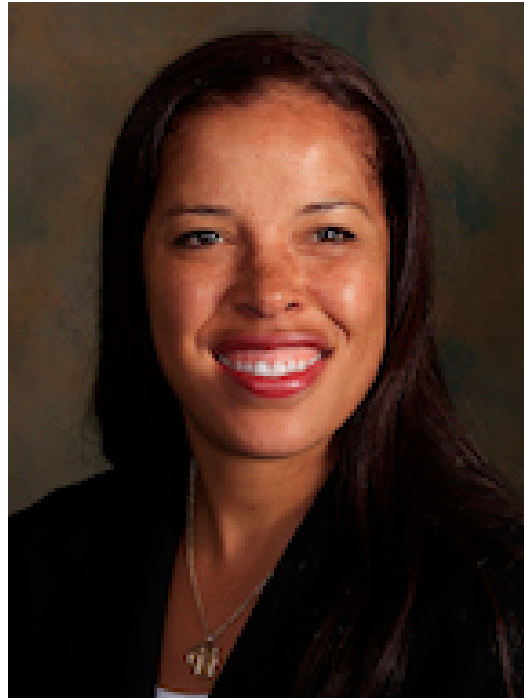
### **PRESENT** (clarifying which treatments are presently available)

- Are the parathyroid glands also going to be taken out?
  - I read about it online, do they work without the thyroid?
  - What happens to calcium levels in the body?
- Can I take out the whole thyroid? I would rather do this.
  - It would be easier to regulate my hormones after surgery
  - I would not need a second surgery.
- What is your opinion about taking out the right side?
  - I want to take it out so I do not have to do it again later.
- Can I get surgery while on my colitis medicine?
  - Assuming my belly gets better, when can I have surgery? Your opinion?

*Problem* → *Solution* → *Technology*

12

## Audio-recording excerpt



## Consultation Summary excerpt

### **PRESENT** (clarifying which treatments are presently available)

- You would very much benefit from removing your thyroid, curing you of your hyperthyroidism.
- We can either take out half or both sides of the thyroid. If you leave little nubbins, they come back.
- You may want to talk to people who have had thyroid surgery to hear about their experiences.
- I'll talk to the endocrinologist and we'll come up with a plan for your medications.
- Have your vocal cords checked because of your voice. Could be done across the street here.
- You could see a GI doctor here. They see a lot of patients with complicated, symptomatic cases.

## Patients review question lists, recordings and summaries



## Patient reactions – decision aids

- “This was exactly the material (statistics) I was looking for all over the web, but having a hard time finding in a consolidated format that made sense...”

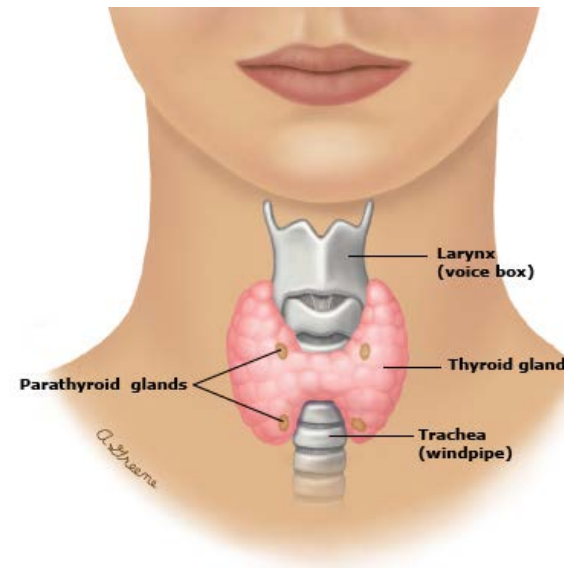


Photo from Emmi Solutions®

## **PSC Technology Users**

PSC Coordinator



Coaching caller



Patient scribe



Patient



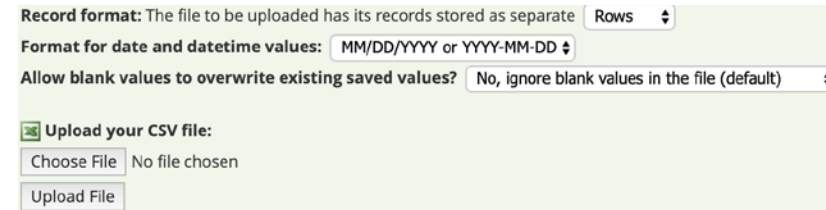
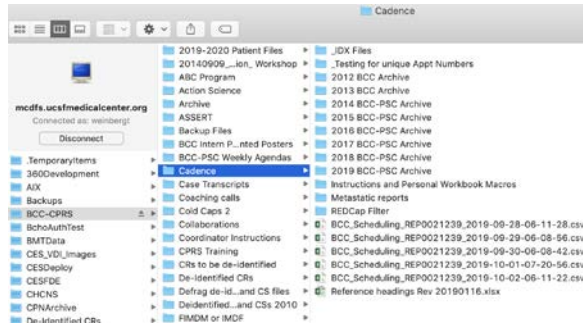




## Program Coordinator Finds Cases

1. Extract appointments from APeX daily

2. Load into REDcap database



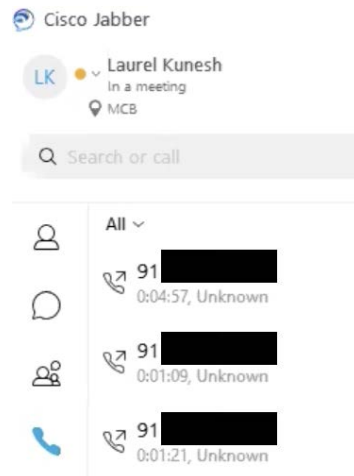
3. Assign to Callers

Final dealer reassignment 2019-20	Related MRN	Appt Date	Appt Time	Day of the week	Provider	Type	Appointment Number	Event Name	Repeat Instrument	Repeat Instance	Agent	Date of interactions	Person contacted	Method of interactions
final_dealer_1920	demo_related_mrn	appt_date	appt_time	day_of_the_week	provider	type	appointment_number	event_name	redcap_repeat_instrument	redcap_repeat_instance	agent	interaction_date	person_contacted	method_of_interactions
Shad, Sonal (33)		10-18-2019	1:30 PM	Friday	53113 - MASHARANI, UMESH	2006 - FOLLOW UP 30		Appointment 1 (Arm 1: PSC)						
								Appointment 1 (Arm 1: PSC)	Interactions	1	Sonal - BCC (73)	09-27-2019	Patient (1)	Inbound email (6)
Shad, Sonal (33)		11-04-2019	12:45 PM	Monday	90839 - MAJURE, MELANIE C	2260 - CHEMO FOLLOW UP		Appointment 1 (Arm 1: PSC)						



## Caller coaches patients before appointments

1. Call patients from VOIP softphone



2. Document interactions in REDcap

**Interactions** Data Access Group: Team Member

Editing existing Appointment Number **12345678** Patient: TEST: 12345678, PROVIDER 10-26-2018 4:00 PM

Event Name: Appointment 1 (Arm 1: PSC)

Appointment Number: 12345678

Agent: [dropdown menu]

TEST Patient  
Home: 415-476-6005 Work: Cell: 818-497-6793  
Email: tia.weinberg@ucsf.edu  
Dr. PROVIDER on 10-26-2018 at 4:00 PM

Date of interactions: [calendar icon] Today P-D-F

Person contacted: [dropdown menu]

Method of interactions: [dropdown menu]

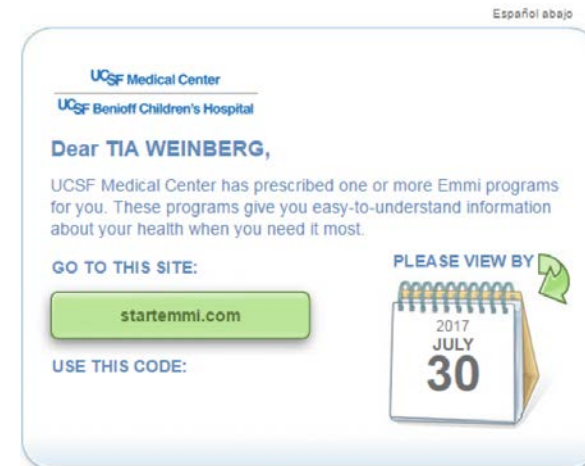
Coaching Call Introduction

Hello, is TEST Patient available?  Yes  No  Does not speak English

Hi, my name is \_\_\_\_, I am calling from UCSF. (Do NOT ask "how are you?")

I understand that you have an upcoming appointment with Dr. PROVIDER. I work with a patient support program and I want to check in with you about some resources we have that may be related to this appointment. Is now a good time to talk?  
 Yes  No

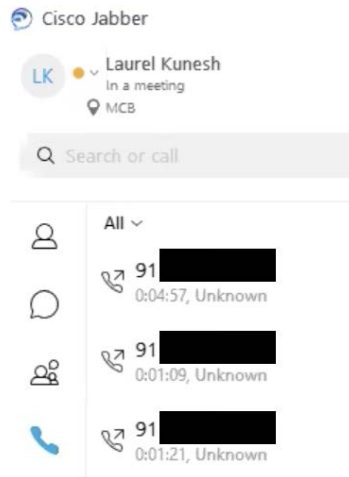
3. Email patients links to EMMI/Healthwise/etc



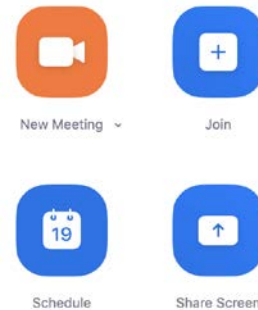


## Patient scribe captures and shares patient questions in advance

1. Call patients from VOIP softphone



2. Record question-listing session in Zoom



3. Route question-list securely to patient and provider

✉ Send-It: Sending file "PAGE INTENTIONALLY LEFT BLANK.docx"

**Instructions for using Send-It:**

Fill out the form below to specify to whom you wish to send the file, as well as other custom info. The recipient address you enter below will receive a message stating that a file is available for download. The email password, which the recipient will use to navigate to the webpage for downloading the file to the device, it may take several moments to upload, so please allow it to continue to upload until it notifies you.

From: Tia.Weinberg@ucsf.edu

To: psc@ucsf.edu  
(recipient emails)

Separate email addresses with commas, semi-colons, or line breaks

Email subject:   
(optional)

Email message:   
(optional)

If there are any errors or if you have additional questions you would like me to add, please feel free to send these to me before your appointment. I will incorporate your changes into our format and bring the most up to date copy to your appointment with Dr. PROVIDER.



## Patient scribe makes recording and takes notes

1. Audio record visit



2. Route recording and summary securely to MD and patient

✉ Send-It: Sending file "PAGE INTENTIONALLY LEFT BLANK.docx"

### Instructions for using Send-It:

Fill out the form below to specify to whom you wish to send the file, as well as other custom information. The email address you enter below will receive a message stating that a file is available for download. The email will include a password, which the recipient will use to navigate to the webpage for downloading the file to their computer. It may take several moments to upload, so please allow it to continue to upload until it notifies you of it.

From:	Tia.Weinberg@ucsf.edu
To: (recipient emails)	<input type="text" value="psc@ucsf.edu"/>
Separate email addresses with commas, semi-colons, or line breaks	
Email subject: (optional)	<input type="text" value="UCSF Consultation Summary"/>
Email message: (optional)	<input type="text" value="Dear TEST,  Included please find my notes from your appointment with Dr. PROVIDER on 10-26-2018.  As mentioned in the service agreement, the summary may"/>



## Patient accesses educational materials

### 1. EMMI videos

Español abajo

UCSF Medical Center  
UCSF Benioff Children's Hospital

Dear TIA WEINBERG,

UCSF Medical Center has prescribed one or more Emmi programs for you. These programs give you easy-to-understand information about your health when you need it most.

GO TO THIS SITE:

[startemmi.com](http://startemmi.com)

USE THIS CODE:

PLEASE VIEW BY

2017  
JULY  
30

### 2. Question lists, summaries, audio recordings

Welcome, Bobby McTest  
Log Out

UCSF Medical Center

Home Messaging Visits My Medical Record Preferences

You Might Want To...

- Read your new message from Kathy L.  
Subject: a message from your provider
- Schedule a(n) Tetanus, diphtheria, pertussis (Tdap) Vaccine. You are overdue for it.

Bobby

Kath

Problem → Solution → Technology



## Supervisors lead weekly case reviews

1. Review recordings



2. Reflect on critical incidents



3. Review dashboards

Intern	N60's	Attempted contact (per visit)	Coached (per visit)	Total Case Count (6/25 – Present)
Aheli*		43	23	20.5
Andre*		88	46	38.5
Ashley		84	72	28
Brian*		74	60	26.5
Harriet*		37	29	44.5
Hila		85	61	26
Jane W*		95	71	28
Jonah*		87	67	37.5
Kell*		89	76	33.5
Madeline*		89	69	34.5
Paul*		105	97	41.5
Yash H		46	40	19
Jane S*		59	42	12.5
Tia		116	112	5
<b>Total</b>	<b>1650</b>	<b>1097</b>	<b>865</b>	<b>395.5</b>
This week		66%	79%	46%
Previous week		68%	79%	45%

## Technology Stack

APEX

Secure shared drive

MyChart

REDCap

VOIP Telephony (e.g. Jabber)

Zoom

Password-Protected Audio-recorders

EMMI / Healthwise / Other educational publishers

Smartphones

Windows, Chrome/Safari, Excel/Word (BigFix, VPN, DDPE, Symantec, ForeScout)

## Future Directions

### Recordings: Increase Patient Knowledge

Synchronous ↔ Asynchronous

#### Applications:

- Patient review
- Peer review
- Coaching & Feedback
- Knowledge sharing
- Quality review
- Safety
- Needs assessment
- Research

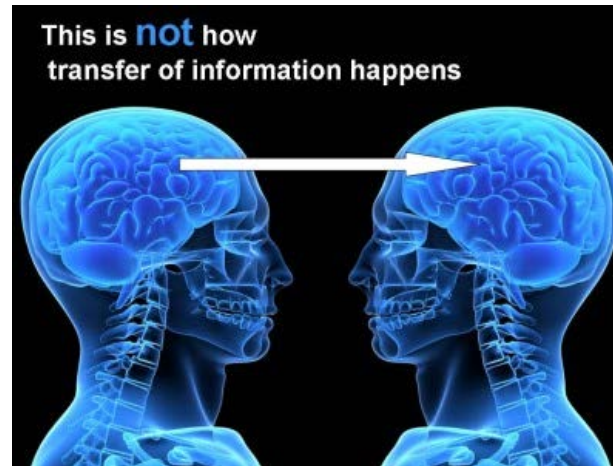


Image courtesy of [www.speakingaboutpresenting.com](http://www.speakingaboutpresenting.com)

#### Stakeholders:

- Patients
- Families
- Advocates
- Language Interpreters
- Researchers
- Payers
- Producers/Manufacturers
- Policy-Makers



## **Call to Action**

**Recordings: Increase Patient Knowledge**

**Who can help us**

**scale up consultation recordings**

**at UCSF?**