

# ***A New Generation of TeleHealth for Correctional Health Care: The State of Maryland Experience***

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**MATRC Pre-Summit Session  
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# Educational Objectives

- Understand health care **NEEDS** in the Correctional system
- To understand the **COMPLEXITY** of health care delivery in the correctional system without Tele-health
- Appreciate the increased public **SAFETY** when Tele-health Technology is used
- See the **Maryland Prison Tele-health program**
- Describe program **Cost Savings & EFFICIENCY** to date for the Department of Public Safety

# Telehealth-Part of the Solution for Public Safety and Health Care



- Keep Inmate-patients in a secure environment ... (SAFETY)*
- Enhance ease of health care..... (EFFICIENCY)*
- Keep Outside staff, outside the walls ..... (COST SAVINGS)*

# Legal Precedent: The Mandate

The prisoner by his arrest is deprived of his liberty for the protection of the public

**“It is but just, that the public be required to care for the prisoner, who cannot, by reason of the deprivation of his liberty, care for himself.”**

Spicer v. Williamson, Supreme Court of North Carolina, 1926

Dr. Spicer sued Sheriff Williamson for payment of services rendered to Peter Camel who had sustained a GSW while being pursued by police for the commission of “larceny and robbery”

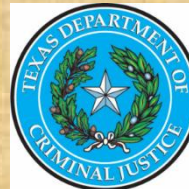


# Legal Precedent: The Mandate

“Deliberate indifference by prison personnel to a prisoner’s illness or injury constitutes cruel and unusual punishment proscribed by the 8<sup>th</sup> Amendment contravening the 8<sup>th</sup> and 14<sup>th</sup> amendment mandating due process”

United States *Supreme Court*  
*decision of 1976 (Estelle vs Gamble)*

J. W. Gamble was a state prisoner within the [Texas Department of Corrections](#) who was given a [prison labor](#) assignment loading and unloading cotton bales from a truck. On November 9, 1973, he injured his back when a cotton bale fell on him. Over the next three months, he complained of back and chest pains, was subject to [administrative segregation](#) for refusing to work, On February 11, 1974, Gamble initiated his lawsuit [pro se](#) by submitting a handwritten document.



# The U.S. Correctional System

6,851,000 Individuals under *supervision* of the  
U.S. correctional System

4,708,100 Community Supervision

3,864,100 on probation

856,900 parole

2,300,000 total incarcerated

1,561,500: State & Federal facilities (sentenced )

738,500 in Jails (un-sentenced)

# US Correctional System Health Care

## The Health Problem among the Inmate population

- 25% enter on anti-psychotics.... 69% at time of discharge
- 76% with substance abuse
- 50% with chronic medical illnesses (HBP, DM, cirrhosis, CKD)
- 14-21% with Infectious diseases (Hep B/C, STD, TB)
  
- 17% homeless
- 27% with physical or sexual abuse
- 12-30% subject of inter-personal violence while incarcerated
- Those with mental illness: 2-3 x more likely to be involved in inter-personal violence

# US Correctional System Health Care

PEW/MacArthur foundation

- 2011 Correctional healthcare > \$8 billion
- Driven by
  - 1976 Supreme court decision
  - Greater length of human life
  - Aging prison population in general

State Prison Health Care Spending. PEW/MacArthur Foundation. 2014

<http://www.pewtrusts.org/~media/assets/2014/07/stateprisonhealthcarespendingreport.pdf>



# US Correctional System Health Care

Physician recruitment into the Correctional system may be challenging:

Preceptions of poor stigma, lack of prestige

Preceptions of unsafe working environment

Often remote environments

Dealing with MALINGERING

# Public Risk when Providing Health Care to Inmates

Every Prisoner, regardless of custody level, should be considered an escape risk

- Escape Packet
- Vehicle check
- Patient search
- Location of Municipal police stations enroute
- Location of State Police Barracks enroute
- Hospitals enroute
- EMS facilities enroute

# The Maryland Process of Inmate Transport for Health Care

- Always two Custody Officers, at minimum
- Transport van with metal mesh grills over the windows
- Long transports such as from Supermax facility in western Maryland, prisoner will stay at facility near Baltimore the night before and night after medical visit: 3 days transport total
- For High risk (Gang members, Supermax lifers), second follow vehicle with two more corrections officers

# The Maryland Process of Inmate Transport for Health Care



Three days of transport  
Three days out of prison  
Three days of Correctional officer Time



# Public Risk when Providing Health Care to Inmates

William Morva,

Inmate at Montgomery County Jail, Virginia

Taken to Montgomery County Regional Hospital

Being transported for evaluation of a minor sprain on 8-21-2006

He overpowered the correctional officer

Fled with the correctional officer sidearm,

Killed a hospital security guard

Fled to the Virginia Tech Campus

Campus placed on lock down

Killed a local county sheriff on a bike trail

before being recaptured.



Mason C, Burke TW, Owens SS.

Dangers of Transporting the Ailing Inmate. Corrections Today, Nov/Dec 2013: 76-82.

[http://www.aca.org/aca\\_prod\\_imis/docs/ochc/Mason\\_Burke\\_Owen\\_Nov-DecCT13.pdf](http://www.aca.org/aca_prod_imis/docs/ochc/Mason_Burke_Owen_Nov-DecCT13.pdf).

# Public Risk when Providing Health Care to Inmates

## Woosen Assaye

Being transported from the Alexandria Virginia County Jail  
To Innova Fairfax Hospital  
He slipped out of his manacles  
Leading to a complete hospital lockdown before recapture



Cameron G. Recent Prisoner Escapes have One Common Factor:  
Hospital Visits. Reuters 4-5-2015.

<http://www.newsweek.com/recent-prisoner-escapes-have-one-common-factor-hospital-visits-319692>

# Public Risk when Providing Health Care to Inmates

## New York State Police Department review

40% of prisoner escapes occurred during transport

68% escaping despite being in a caged vehicle

Associated 12% injury rate to security guards

Ross DL. Prisoner Transports, Officer Safety and Liability Issues. 3-9-2009.  
<http://www.correctionsone.com/products/vehicle-equipment/prisoner-transport/articles/1843670-Prisoner-transports-officer-safety-liability-issues/>



# Cost of Prison Escape in \$\$\$

El Chapo (Shorty) Guzman  
Paid out some \$50 million in bribes  
\$1 million to have tunnel dug  
Recaptured by Mexican Special  
Military forces  
Ranked among the most powerful  
men in the world by  
Forbes Magazine  
2009-



**NOT !!!!!!!!!!!!!!!**





# Cost of Prison Escape in \$\$\$

## Cost of Inmate Escape and Recapture

High profile escape of Richard Matt and David Sweat

From the Clinton Upstate New York prison

**Richard Matt** had broken neck and dismembered  
a 72 year old man

**David Sweat** shot a police officer multiple times  
the ran over the officer with a car

Over 1000 law enforcement officers in the pursuit

Richard Matt Shot and Killed

David Sweat captured after being shot

Cost about \$23,000,000 over 23 days

About \$1,000,000 / day

Manhunt for escaped prison inmates cost New York  
nearly \$1 million a day in overtime. Posted August 15, 2015.

<http://fox6now.com/2015/08/15/manhunt-for-escaped-prison-inmates-cost-new-york-nearly-1-million-a-day-in-overtime/>



# Cost of Prison Escape in \$\$\$

19 year old man on probation

Placed in Medium Security Facility June 4

Incarcerated for parole violation and residential Burglary.

Escaped June 8

Re-Captured June 10

Cost: No lost lives

\$17,000

\$8,500/day

Deployed 30 "Security Staff", 14 "Non-Security Staff"



**ESCAPEE FROM ILLINOIS YOUTH CENTER**

- Denzell Walker
- Age 19
- Height: 5' 11"
- Weight: 140 lbs
- Wearing blue jumpsuit
- Parole violation for burglary charges



# The Maryland Correctional System

22,000 inmates

24 facilities

Includes:      Jail      Pre-Trial (Pre-Sentencing)  
                  Prison    Post-Trial (Sentenced)

Baltimore City Jail

6<sup>th</sup> largest Jail system in the U.S.  
45,000 to 60,000 persons  
processed/year







- Increase and expand Tele-Health consults by specialty
- Decrease ER and Hospitalization admissions
- Increase Public Safety (SuperMax inmates; lifers)
- Reduce DPSCS staff *over-time* and transportation costs

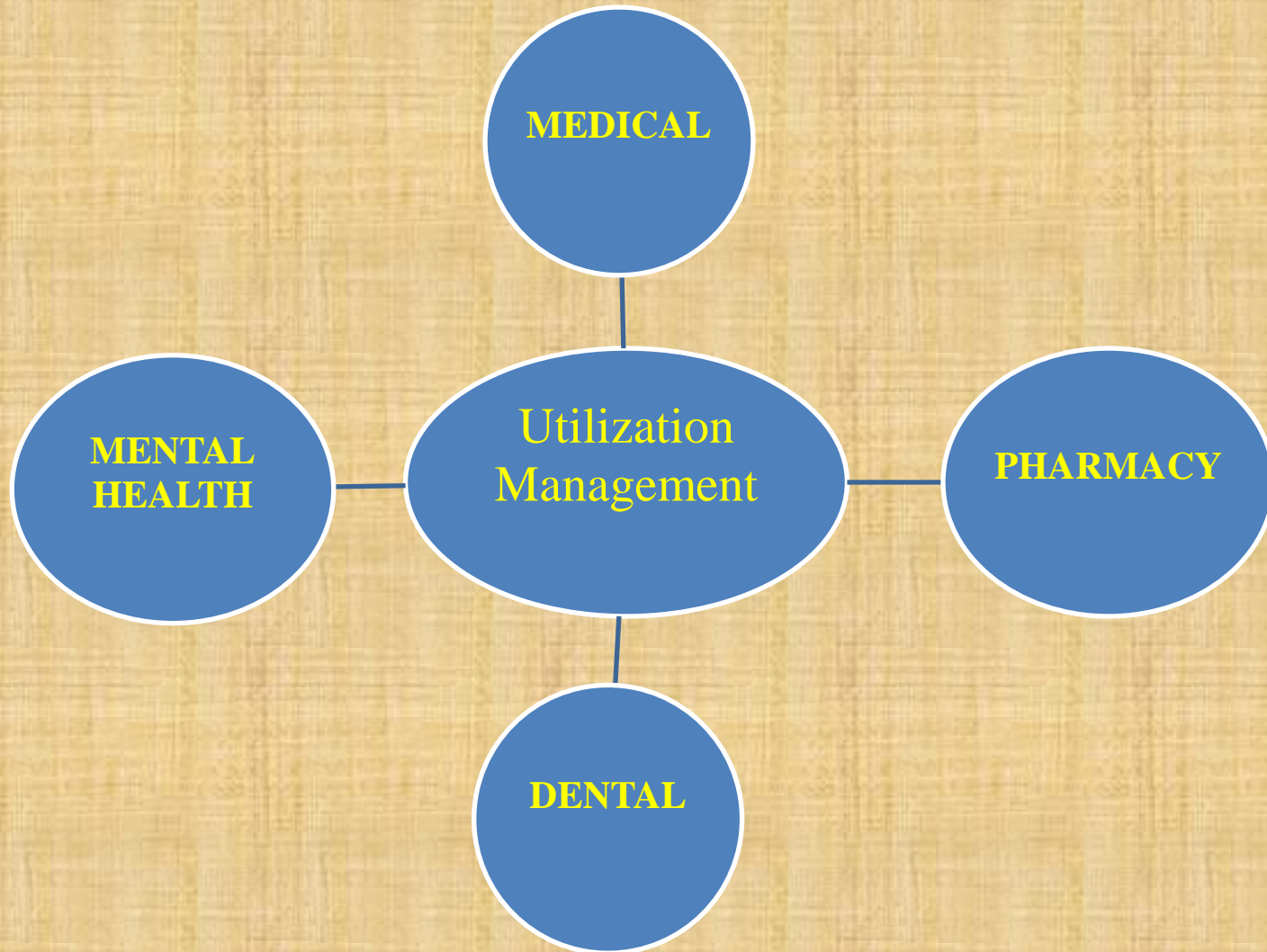


North Branch Correctional Institute  
1,400 +/- inmates, LWOP etc





# Maryland Approach-Service Areas



# The Iowa Correctional Model

***TELEMEDICINE JOURNAL***

Volume 5, Number 3, 1999

Mary Ann Liebert, Inc.

## ***Telemedicine to Iowa's Correctional Facilities: Initial Clinical Experience and Assessment of Program Costs***

SUSAN ZOLLO, M.A.,<sup>1</sup> MICHAEL KIENZLE, M.D.,<sup>2</sup> PAUL LOEFFELHOLZ, M.D.,<sup>3</sup> and  
SUSAN SEBILLE, M.S.<sup>4</sup>

# Reasons to Invest in Tele-Health

Region	Off-site Medical Trip	ER Trip	Total	Vehicle Transport Cost	Staffing Cost per region
CENTRAL	1435	344	1779	\$128,283.69	\$3,629,480.00
SOUTHERN	3335	459	3794	\$273,585.34	\$2,062,120.00
NORTHERN	2751	360	3111	\$224,334.21	\$790,128.00
<b>TOTAL</b>	<b>7521</b>	<b>1163</b>	<b>8684</b>	<b>\$626, 203.24</b>	<b>\$6,481,728.00</b>

Wexford UM data July 1, 2011 – June 30, 2012

DPSCS vehicle transport data-July 1, 2011- June 30, 2012  
 (Vehicle Recovery Cost=\$22.11 Vehicle Operating Cost=\$50.00)-Steve Bass  
 DPSCS “Unavailable for Works & Special Assignment Report” –Jeff Wantz



# Recommended Enhancement Telemedicine

- Overall investment ~\$1.2 Million
  - 19 RP-Lite units and 28 laptops
  - 19 Stethoscope kits
  - 19 Enhanced Imaging General Exam Cameras
  - Retinal Cameras
  - Peripherals pending:
    - Blood Pressure
    - Digital X-ray (PACS)
    - EKG

Goal- reduce trips-reduce Overtime- Develop State of the Arts telemedicine program and increase timeliness to accessing quality care

# Partners in the DPSCS Telehealth Project



# Methodology

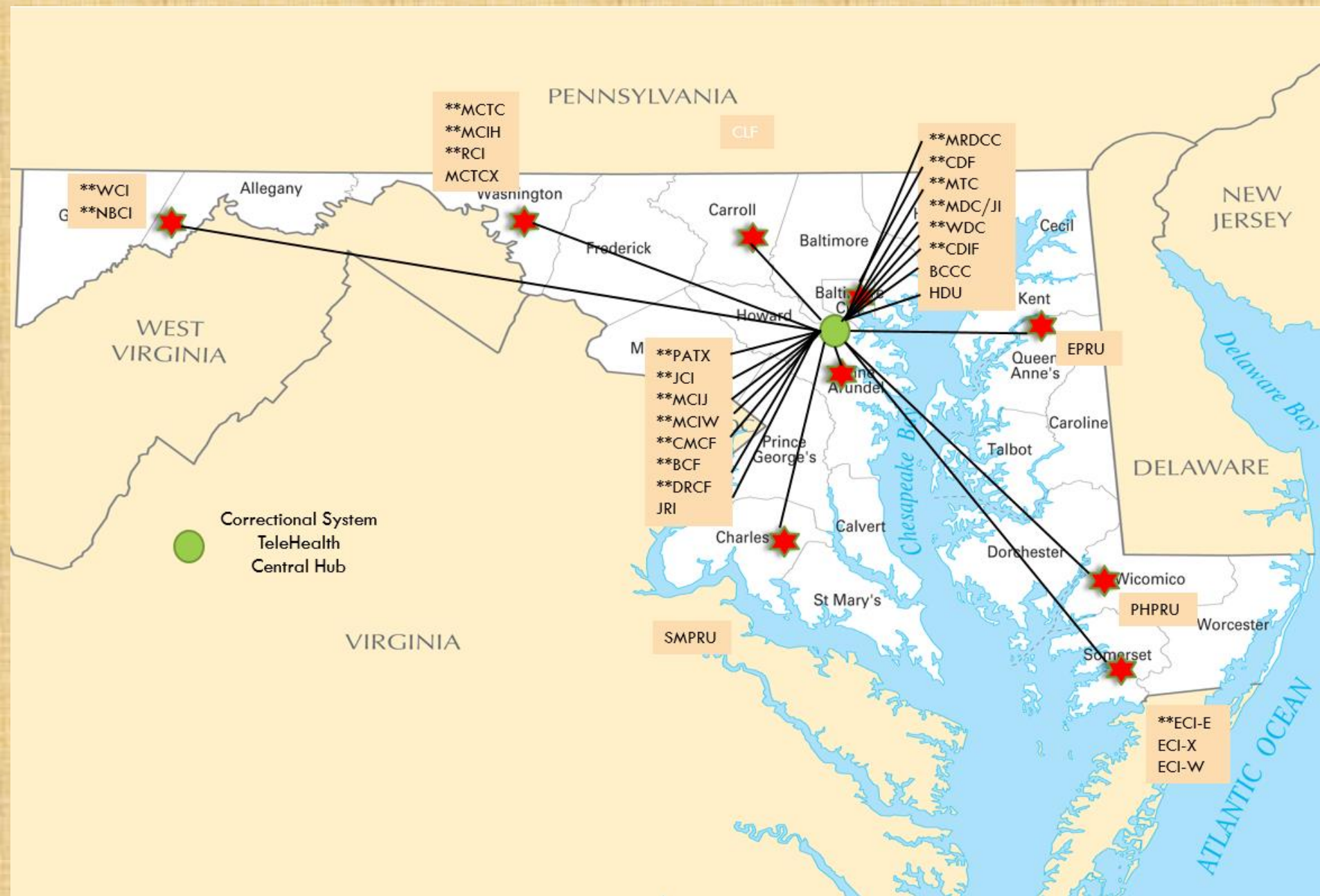
- Formal Presentation to Department of Public Safety and Correctional Services Key Stakeholders
  - Secretary of Corrections- ~3 meetings
  - Commissions of DOC and Jail- ~3 meetings
  - Deputy Director of Fiscal- ~4 meetings
  - Executive Clinical Team- ~8 meetings
  - Director of Information Technology- ~5 meetings
  - Hospital Specialty Service Providers- ~4 meetings



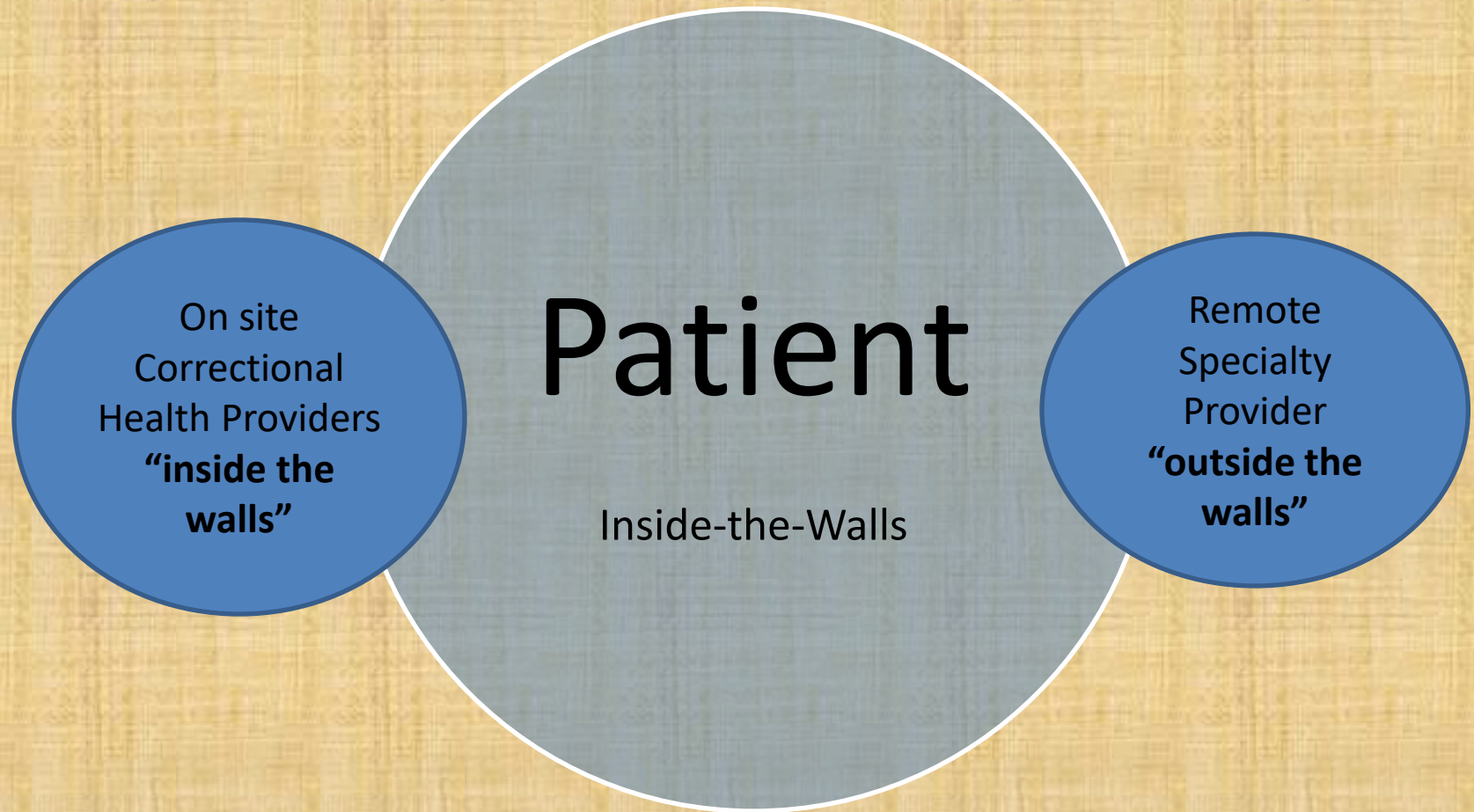
# Specialties Identified

- **Cardiology**
- **Urology**
- **Gastroenterology**
- **Oncology**
- Endocrinology
- ED Triage
- ED Ophthalmology
- Wound Care
- Surgery (pre/post)
- Orthopedic

**HIV and HCV Already Established**



# Site and Specialty Telehealth Providers





# Information Technology

- DPSCS-Information Technology and Communication Division (ITCD)
  - Internet access
  - Firewall set up
  - Cloud Base systems-Security concerns (MSP)
- Wexford
  - Liaison between DPSCS and InTouch
  - On the ground
- In Touch
  - Real time assistance “TAC” Team 24/7

# Prior to Deployment

- Site Visit-Room Identification
- Meeting with institution Warden and Chief of Security
- Meeting with Institution Medical Team Leadership
- Meeting with institution Information Technology personnel
- Nineteen (19) individual meetings!!!!

# Sally Port

Definition: Protected point of entry into a secure location







# Tele-Health Unit

PAST



2000

PRESENT



2016

# Inmate and Care Providers “Inside the Walls”



Remote physician, in Baltimore seen on the monitor interviewing patient  
Inside-the-walls Physician available to perform the surrogate examination



# General Exam Camera - Peripheral





# The Iowa Correctional TeleHealth Model

TELEMEDICINE JOURNAL  
Volume 5, Number 3, 1999  
Mary Ann Liebert, Inc.

***Circuit charges+ Equipment+ (Per-minute chgs X  
No. Minutes X No. Consults) + Personnel+  
Space/Facilities= Total cost***

***Cost per consultation = Total cost/No. of consults***

SUSAN ZOLLO, M.A.,<sup>1</sup> MICHAEL KIENZLE, M.D.,<sup>2</sup> PAUL LOEFFELHOLZ, M.D.,<sup>3</sup> and SUSAN SEBILLE,  
M.S.<sup>4</sup>

Highly complex Cost predictive Modeling

# The Maryland Corrections TeleHealth Model Office of Inmate Health Services-OIHS Cost Model

<b>Vehicle Cost</b>	<b>\$72.11 per trip</b>
<b>Custody Cost</b>	<b>\$64.92 for 2 officers per hour</b>
<b>Custody Hours</b>	<b>6.50 avg hours of custody time per trip</b>

**\$368.46 total average trip**

# Reasons to Invest in Tele-Health

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<b>TOTAL</b>	<b>7521</b>	<b>1163</b>	<b>8684</b>	<b>\$626,203.24</b>	<b>\$6,481,728.00</b>

**Total  
\$7,107,931**

Wexford UM data July 1, 2011 – June 30, 2012

DPSCS vehicle transport data-July 1, 2011- June 30, 2012  
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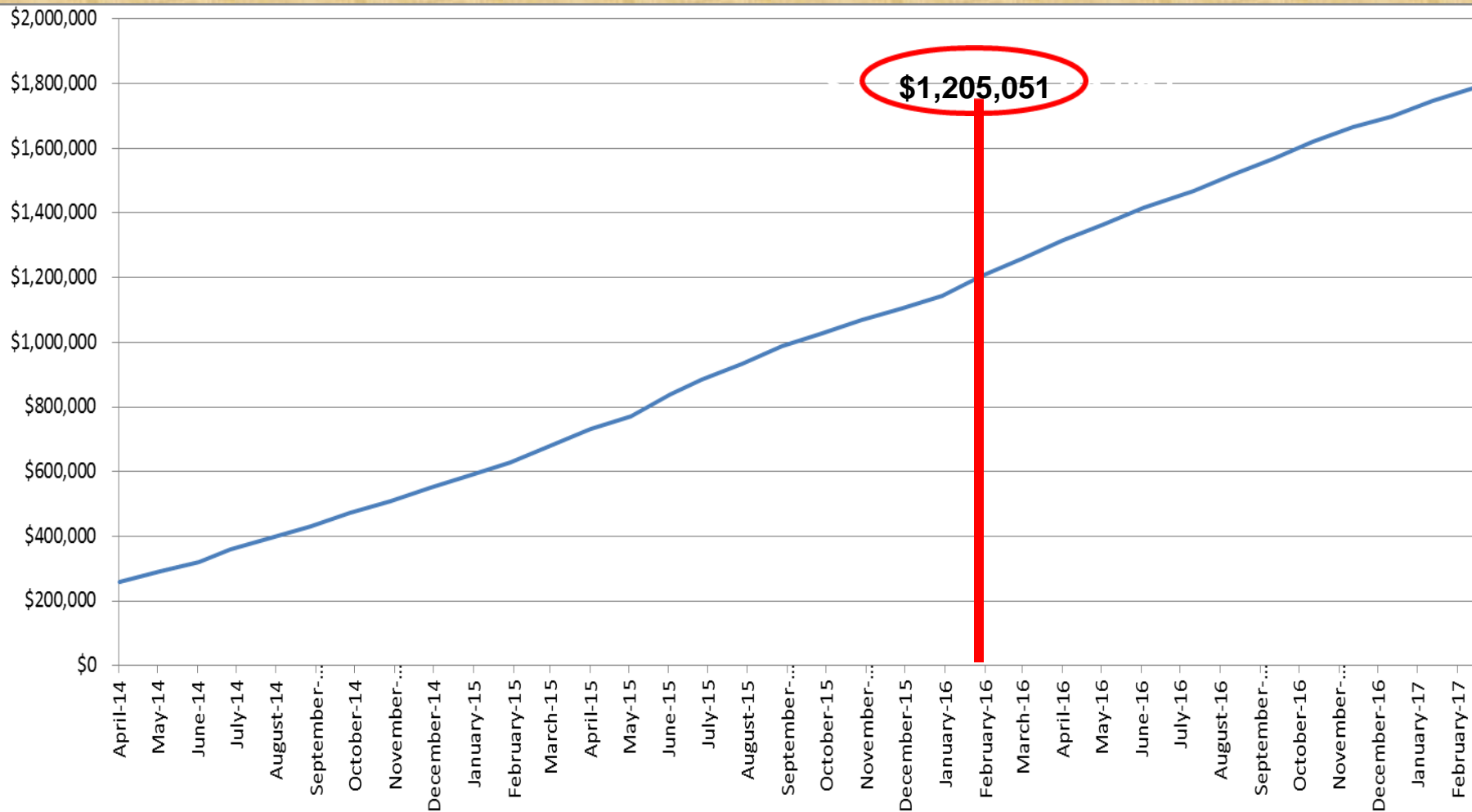
# Utilization and Cost Savings Data

Trips/Custody Hrs	
Encounters	Custody Hrs
<b>FY14+FY15+FY16 +FY17 Totals</b>	
1,025	6,663
1,908	12,403
1,996	12,974
<b>5,933</b>	<b>32,039</b>
<b>\$ Savings</b>	
Vehicle	Custody
<b>FY14+FY15+FY16+17 Totals</b>	
\$74,956	\$295,401
\$139,707	\$551,018
\$146,321	\$577,236
\$360,983	\$1,423,655
<b>Total</b>	<b>\$1,784,639</b>

- Vehicle Costs= \$72.11 per trip
- Custody Costs= \$64.92 for 2 officers per hour
- Custody Hours= 6.5 average hours of custody time per trip



# Cumulative Cost Savings



Inmate Medical Health Care and Utilization Services for the Maryland DPSCS February 2017

# Unique Telehealth Application

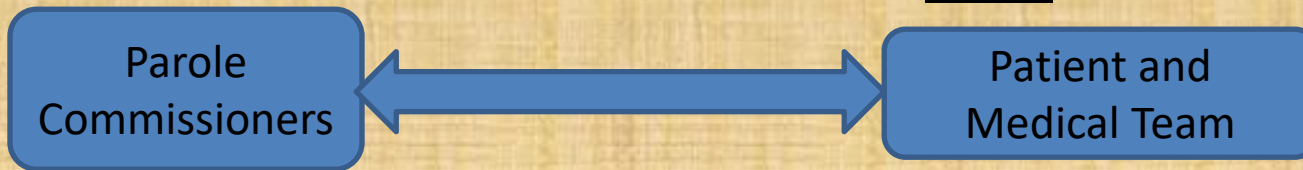
- Medical Parole/Compassionate Release

Outside the Walls

Parole  
Commissioners

Inside the Walls

Patient and  
Medical Team



```
graph LR; A[Parole Commissioners] <--> B[Patient and Medical Team]
```


- Medicaid Enrollment

Outside the Walls

Health Care  
Access  
Maryland

Inside the Walls

Patient and  
discharge planner



```
graph LR; A[Health Care Access Maryland] <--> B[Patient and discharge planner]
```

# Opportunities

- Recruit additional Telehealth specialists
- Tele-Psychiatry
- Tele-Pharmacy
- Tele-Dental
- Additional unique applications

*Thank you!*



