

Systems Redesign Means Improving Care Beyond ACA

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Advanced Clinic Access

- ✦ Eligibility Reform in 1996/97 greatly expanded the number of veterans entitled to VA care.
- ✦ By 1999 patients were waiting months for services.
- ✦ VHA adopted the principles of Advanced Clinic Access (ACA) to reduce the waiting times and improve quality of care.
- ✦ Primary Care was the initial focus, which later spread to Specialty Care then Business and Administration processes.

10 Key Changes for ACA

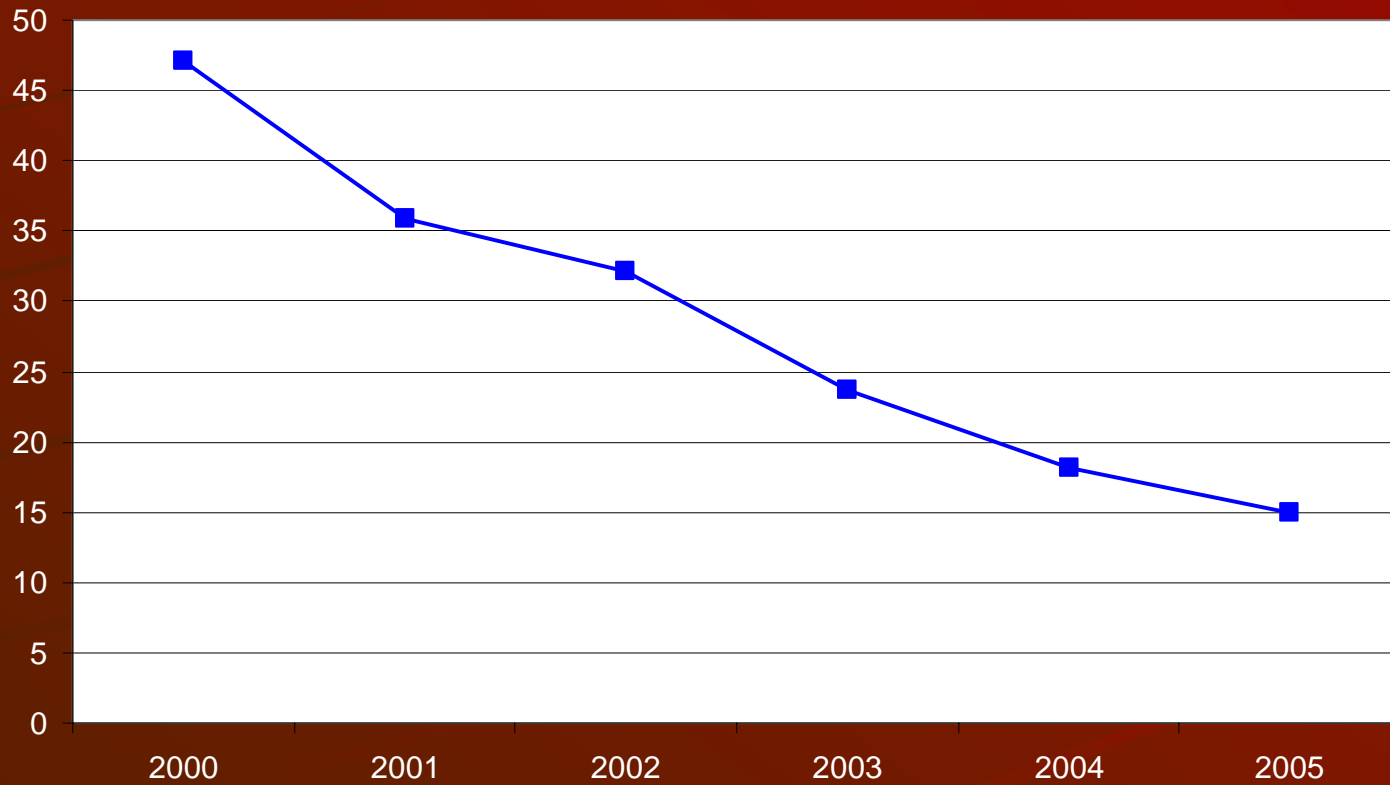
1. Work down the backlog
2. Reduce Demand
3. Understand supply and demand
4. Reduce appointment types
5. Plan for contingencies
6. Manage the constraint
7. Optimize the care team
8. Synchronize patient, provider and information
9. Predict and anticipate patient needs
10. Optimize rooms and equipment

Spread of ACA Principles

- ◆ National ACA Steering Committee
- ◆ ACA national conferences
- ◆ Points Of Contact
- ◆ Performance Measures
- ◆ Coaches College
- ◆ VISN Collaboratives

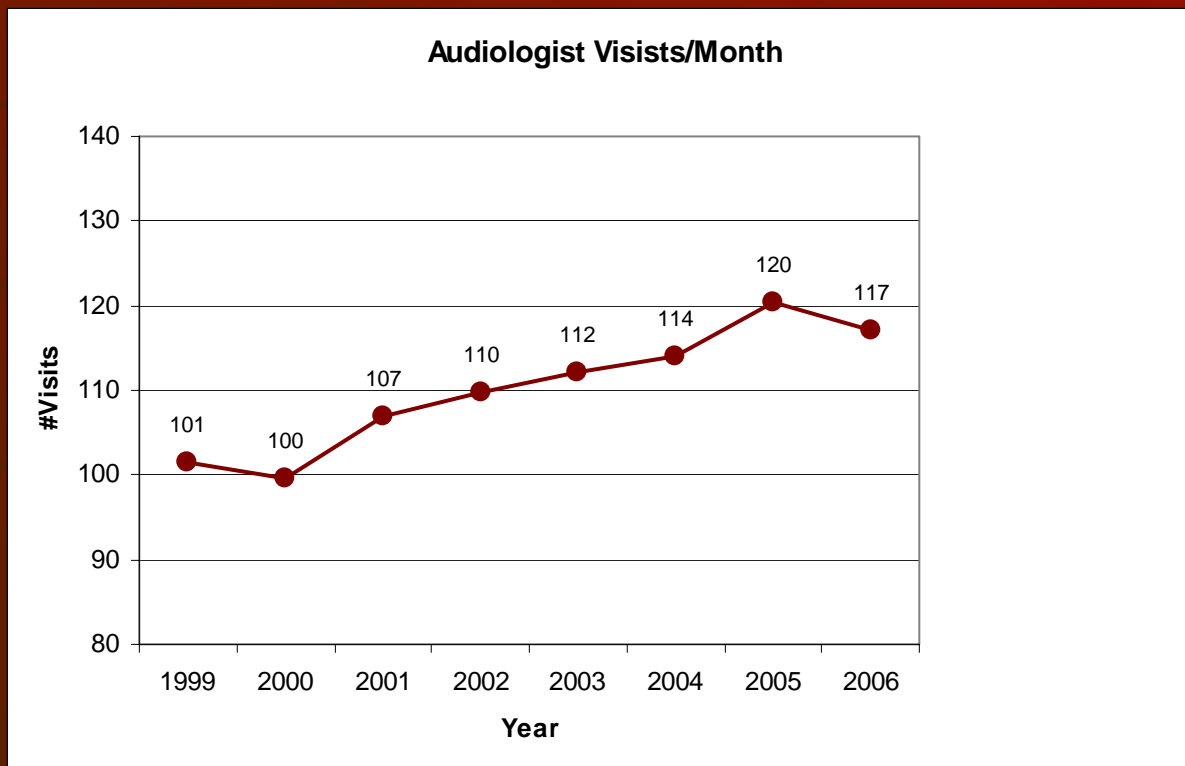
ACA Impact on VA Audiology

AVERAGE WAITING TIME (DAYS)

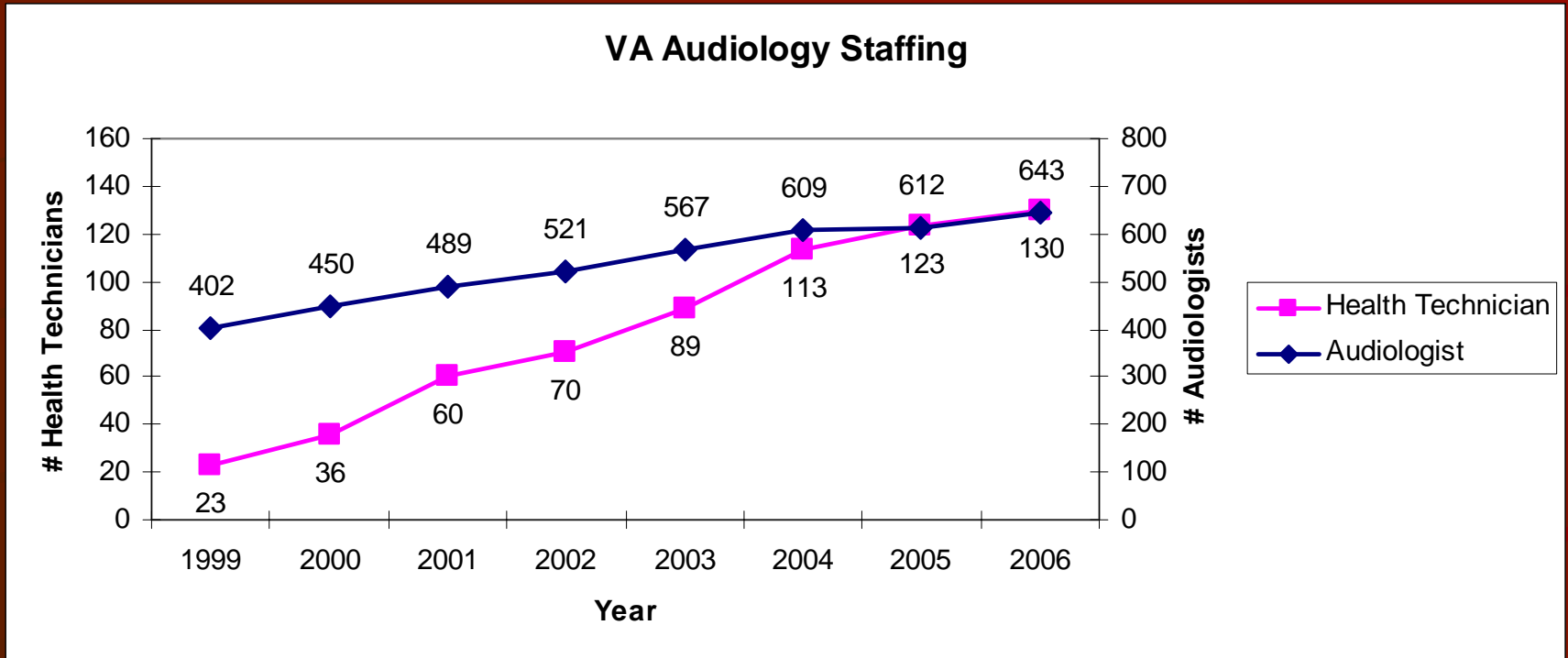


ACA Impact on VA Audiology

19% increase in the average number of visits/month/audiologist



ACA Impact on VA Audiology



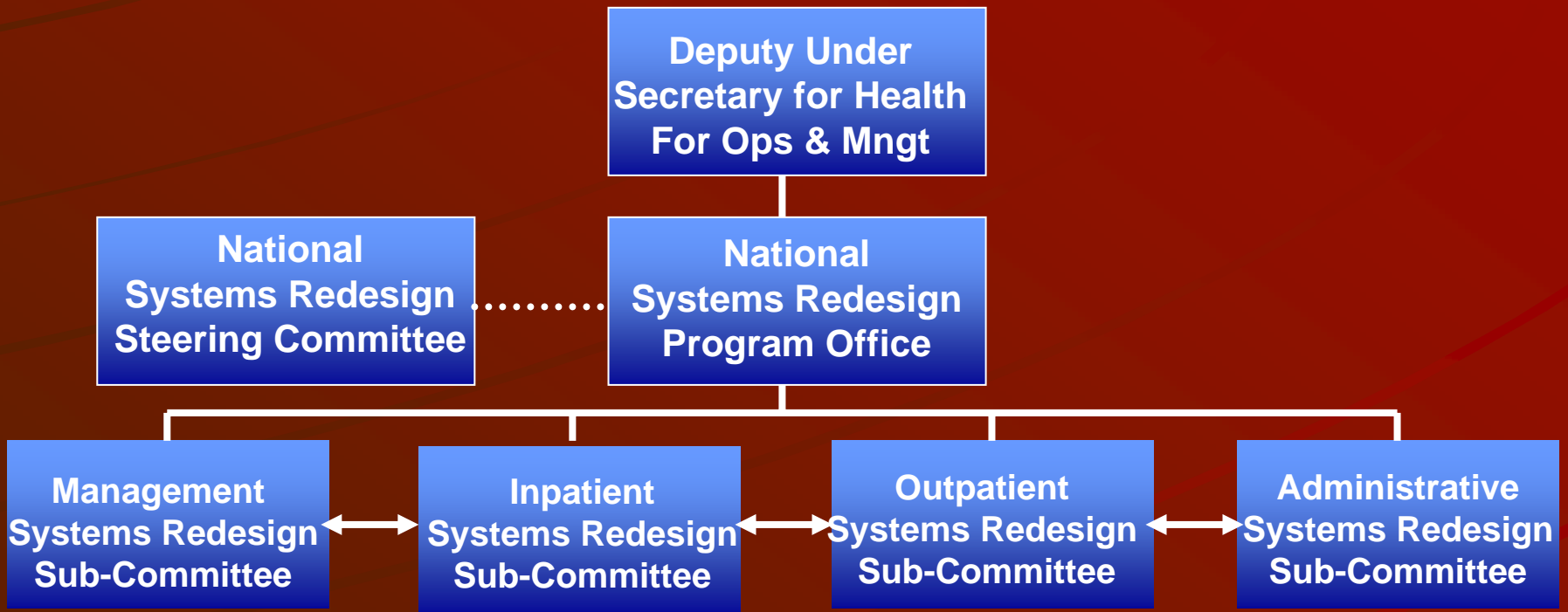
Time for Change

- ✦ Although successful, further waste reduction requires that we move beyond the 10 Key Changes of ACA.
- ✦ Administration and management left out of Advanced CLINICAL Access.
- ✦ Innovation and change developed by industry and large health care systems provide roadmap to further efficiency.

VHA Systems Redesign

- ◆ Advanced Clinic Access
- ◆ Lean Thinking
- ◆ Six Sigma
- ◆ The Theory of Constraints
- ◆ Queuing Theory
- ◆ General Systems Theory
- ◆ Etc....

VHA Systems Redesign



<http://srd.vssc.med.va.gov>

VHA Systems Redesign

- ◆ National System Redesign Steering Committee
 - Support subcommittees
 - ◆ Measurement
 - ◆ Education
 - ◆ Academics
 - ◆ Rewards and Recognition

VHA Systems Redesign

- ◆ Spread of efficiency principles will continue to evolve
- ◆ Coaches College
- ◆ POC's
- ◆ SR Newsletter
- ◆ Site Visits
- ◆ Awards and Recognition

Audiology Systems Redesign

- ◆ Steering Committee (monthly)
- ◆ VISN Champions Calls (quarterly)
 - Facility Champions
- ◆ National Coaches
- ◆ Coaches College
- ◆ Audiology conference Calls (quarterly)
- ◆ Success Stories

Audiology Systems Redesign Spread

- ◆ Continue spread with a regional emphasis
- ◆ VISN Champions identified to help facilities achieve performance goals
 - Integrated programs without ASP leadership
- ◆ Set up collaboration with other Audiology programs in VISN to help each other.
- ◆ Outside leadership on team.
- ◆ "None of us are as smart as all of us."

Audiology

Performance Measurement Targets

	FY05	FY06	FY07	FY08
New	73%	82%	89%	?
Estab.	92%	92%	92%	?
Miss. Op.	10%	9%	8%	?

Audiology Flow

Hearing Evaluation Flow

- ◆ Siemens Research Corporation conducted a patient flow analysis of hearing evaluations at several VA Audiology Clinics.
- ◆ Measured the cycle time or total time it takes to move from the beginning to the end of a process and the time spent at each step in the process.
- ◆ Modifying the order of the steps and combining steps results in a more efficient process.

Hearing Evaluation Workflow Analysis

PA	Patient Arrives	2.29
AE	Audio Exam	29.83
BR	Briefing about results	4.40
HO	Briefing about HA Options	3.13
PM	Preparation of Materials	3.20
FI	Fashioning of Impression	1.65
WI	Waiting for Impression to settle	1.06
RI	Removing Impression	1.10
GB	Getting Box	1.17
IB	Impression in box	1.17
SF	Scheduling Form	1.00
SP	Scheduling Patient	2.86
PL	Patient Leaves	1.00
EA	Entering Audiogram	5.80
OF	Order form	4.33
FB	Order form in box	1.00
DM	Drop in mailbox	1.67
MR	Medical report	9.60
	Total Time	76.26

SRC Workflow

PA	Patient Arrives	2.29
AE	Audio Exam	29.83
EA	Enter Audiogram	
BR	Briefing about results	4.40
HO	Briefing about HA Options	3.13
PM	Preparation of Materials	3.20
FI	Fashioning of Impression	1.65
WI	Waiting for Impression to settle	6.50
GB	Getting Box	
SF	Scheduling Form	
OF	Order form	
RI	Removing Impression	1.10
IB	Impression in box	1.17
FB	Order form in box	1.00
SP	Scheduling Patient	2.86
PL	Patient Leaves	1.67
DM	Drop in mailbox	
MR	Medical report	9.60
	Total Time	68.40

Linear Audiology Model

- ◆ Current Audiology practice is linear
 - All steps performed by audiologist.
 - ◆ Greet and Seats patients
 - ◆ Case history, otoscopy, cerumen management
 - ◆ Hearing Evaluation
 - ◆ Impression
 - ◆ Ordering, boxing and mailing impressions
 - ◆ Scheduling return visits
 - ◆ Stocking booth supplies
 - ◆ Etc.....

Linear Audiology Model

- ◆ Audiologist is the constraint (rate limiting step)
- ◆ Number of audiologists determines amount of work accomplished
- ◆ Increase productivity
 - Add more audiologists
 - Reduce demand for services

Drive Work Away From Constraint

- ◆ ACA stipulates that “Any work the provider is doing that is not related specifically to his or her unique skills and expertise should be assigned to other members of the care team.”
- ◆ Do all the steps of a typical hearing evaluation need the unique skills and expertise of an audiologist?

Dental Staffing Model

- ✦ Dentists (150,000)*
- ✦ Dental Hygienists (158,000)*
 - 1:1 ratio
- ✦ Dental Assistants (267,000)*
 - 1.78:1 ratio
- ✦ Dentists to Hygienists/Assistants
 - 2.83:1 ratio

*Bureau of Labor Statistics 2004

Team Audiology Model Proposal

One health technician
for every VA Audiologist!

Who does the work?

PA	Patient Arrives	2.29
AE	Audio Exam	29.83
EA	Enter Audiogram	
BR	Briefing about results	4.40
HO	Briefing about HA Options	3.13
PM	Preparation of Materials	3.20
FI	Fashioning of Impression	1.65
WI	Waiting for Impression to settle	6.50
GB	Getting Box	
SF	Scheduling Form	
OF	Order form	
RI	Removing Impression	1.10
IB	Impression in box	1.17
FB	Order form in box	1.00
SP	Scheduling Patient	2.86
PL	Patient Leaves	1.67
DM	Drop in mailbox	
MR	Medical report	9.60
	Total Time	68.40

Who does the work?

Health Technician		
PA	Patient Arrives	2.29
PM	Preparation of Materials	3.20
FI	Fashioning of Impression	1.65
WI	Waiting for Impression to settle	6.50
GB	Getting Box	
SF	Scheduling Form	
OF	Order form	
RI	Removing Impression	1.10
IB	Impression in box	1.17
FB	Order form in box	1.00
SP	Scheduling Patient	2.86
PL	Patient Leaves	1.67
DM	Drop in mailbox	
	Total Time	21.44

Audiologist		
AE	Audio Exam	29.83
EA	Enter Audiogram	
BR	Briefing about results	4.40
HO	Briefing about HA Options	3.13
MR	Medical report	9.60
	Total Time	46.96

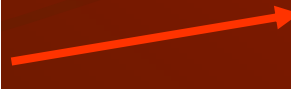
Audiologist's Schedule

Audiologist

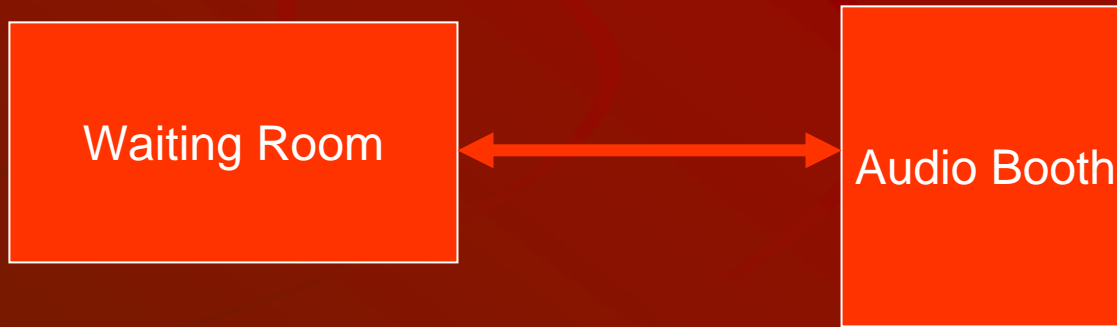
8:00	Adm.
8:15	
8:30	Hearing Evaluation
8:45	
9:00	
9:15	
9:30	Hearing Evaluation
9:45	
10:00	
10:15	
10:30	Hearing Evaluation
10:45	
11:00	
11:15	
11:30	Adm.
12:00	Lunch
12:30	Adm.
1:00	Hearing Evaluation
1:15	
1:30	
1:45	
2:00	Hearing Evaluation
2:15	
2:30	
2:45	
3:00	Hearing Evaluation
3:15	
3:30	
3:45	
4:00	Adm.
4:30	
4:45	

Audiologist/Health Tech.

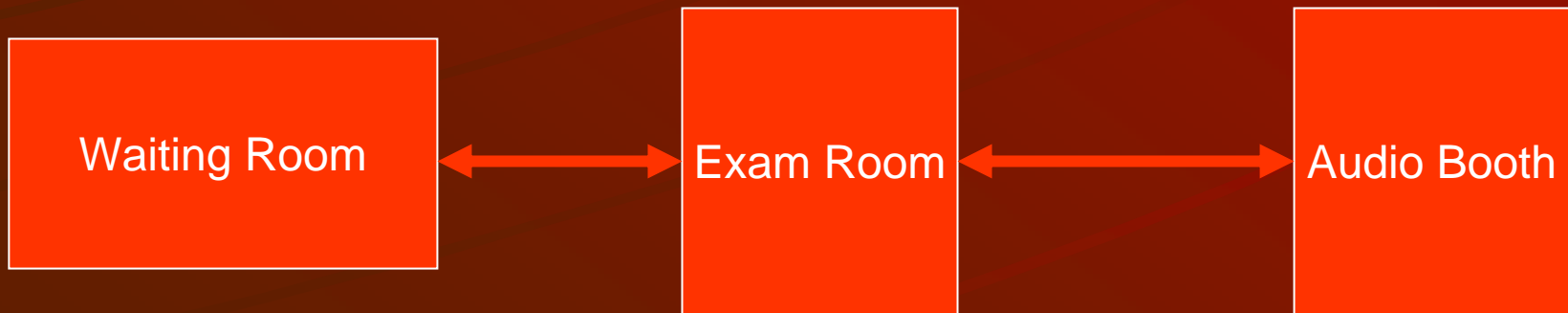
8:00	Adm.
8:15	
8:30	Hearing Evaluation
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10:00	Hearing Evaluation
10:15	
10:30	
10:45	Hearing Evaluation
11:00	
11:15	
11:30	Adm.
12:00	Lunch
12:30	Adm.
1:00	Hearing Evaluation
1:15	
1:30	
1:45	Hearing Evaluation
2:00	
2:15	
2:30	Hearing Evaluation
2:45	
3:00	
3:15	Hearing Evaluation
3:30	
3:45	
4:00	Adm.
4:30	
4:45	



Linear Audiology Space



Team Audiology Space



Direct Patient Care Time

✦ Linear Audiology:

- Audiologist 6 hours
- 6 HE's/day
- 30 visits per week

✦ Team Audiology:

- Audiologist 6 hours
- 8 HE's/day
- 40 visits per week

- HT 2.85 hours assisting audiologist
- HT 5.15 hours available for WI, restocking booth, checking in HA's, etc...

Team Audiology Clinic Costs

- ◆ One GS 5/6/7 Health technician for each staff audiologist
- ◆ One additional exam room for each health technician

Team Audiology Clinic Gains

- ◆ 30% increased capacity
- ◆ Missed Opportunities will decrease:
 - # of visits increases which increases your denominator for calculating Missed Ops.
- ◆ Health technician has over 5 hours each day to provide other support duties to reduce workload
- ◆ Audiologist spends no more time seeing patients!

C&P's

- ✦ Health technician greet and seat the patient, ensure case history completed
- ✦ Otoscopy, cerumen management prior to examination
- ✦ Automated OAE's and Immittance

Hearing Aid Fitting

- ◆ Greet and seat
- ◆ Otoscopy, cerumen management prior to fitting
- ◆ Set up hearing aids, attach programming cables
- ◆ Instruct patient in use and care of instruments
- ◆ Schedule follow-up, administer Outcome Measure





**It's time to rethink how we
deliver VA Audiologic care!**