

# Improving Telephone Access in Radiology



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## Purpose



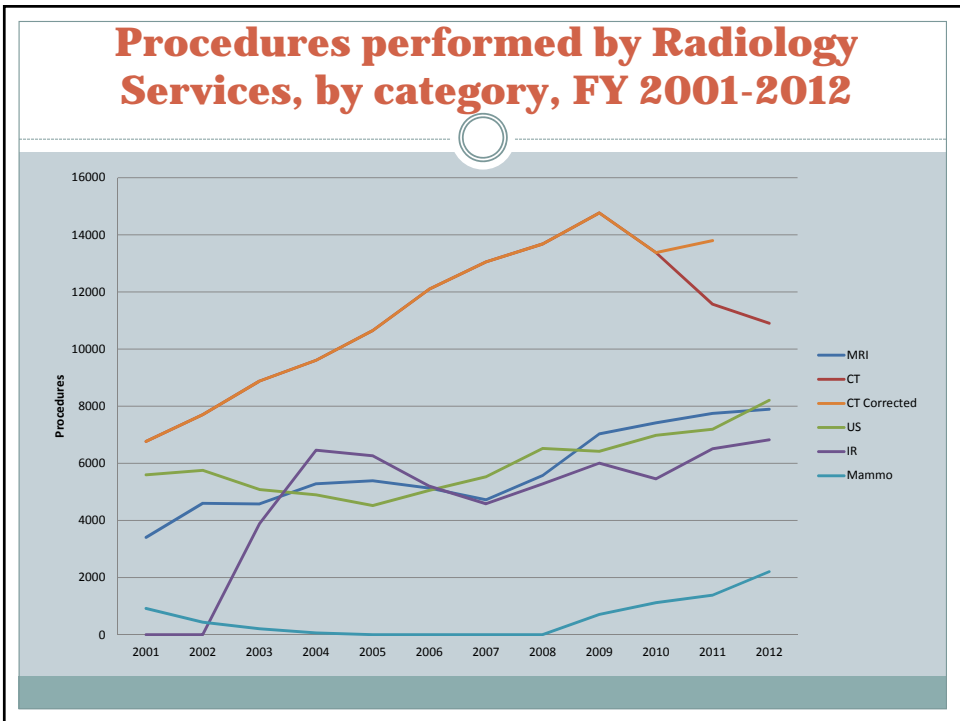
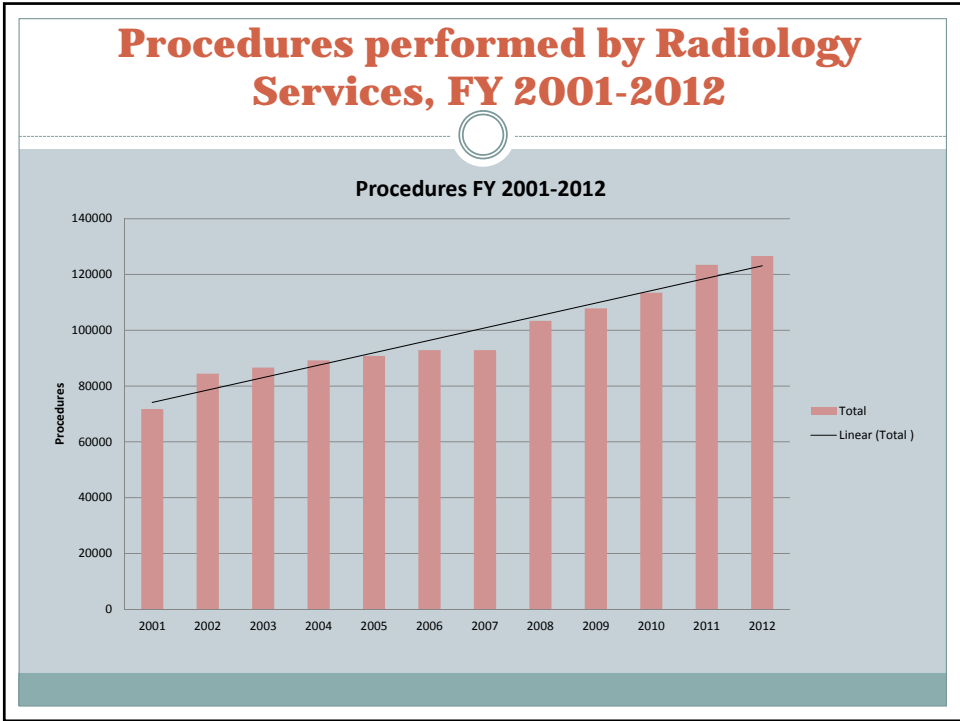
- Patients are not able to reach the Radiology department by phone, leave a message, or receive follow up phone calls
- To improve telephone access in the Radiology department

## Methods

- The workload of the Radiology department was categorized and analyzed from 2001 to 2012
- Incoming calls were analyzed from September 2012 to October 2012
- Factors surrounding Radiology procedure scheduling include: policies, people, processes, and products were reviewed to determine their potential contribution to the problem

## Radiology Department's workload for the fiscal years (FYs) 2001- 2012

| <b>FY</b> | <b>Workload</b> |
|-----------|-----------------|
| 2001      | 74137           |
| 2002      | 78589           |
| 2003      | 83041           |
| 2004      | 87493           |
| 2005      | 91945           |
| 2006      | 96496           |
| 2007      | 100848          |
| 2008      | 105300          |
| 2009      | 109752          |
| 2010      | 114204          |
| 2011      | 118656          |
| 2012      | 123108          |



## Policy Review

Added new services simultaneously increased gap in clerical FTEE (man power) required (reception and scheduling) and clerical FTEE on board

**New & added Radiology services**

| New Radiology Services     | Year Added |
|----------------------------|------------|
| Screening Mammography      | 2009       |
| Diagnostic Mammography     | 2009       |
| Breast Biopsies            | 2010       |
| Breast Ultrasound          | 2010       |
| Musculoskeletal Ultrasound | 2010       |
| 2 <sup>nd</sup> CT         | 2007       |
| 2 <sup>nd</sup> MRI        | 2009       |
| Weekend C&P clinics        | 2011       |

**No increase in Administrative Staff**

| Year | Technologist & Administrative staff | Technologists | Administrative staff |
|------|-------------------------------------|---------------|----------------------|
| 2006 | 48                                  | 32            | 15                   |
| 2007 | 45                                  | 35            | 14                   |
| 2008 | 52                                  | 38            | 15                   |
| 2010 | 60                                  | 45            | 16                   |
| 2012 | 58                                  | 45            | 13                   |
| 2013 | 65                                  | 50            | 14                   |

## Process Review

- Increasing complexity and difficulty in managing phone calls and scheduling walk in patients simultaneously (September 2012 to October 2012)

**Radiology Service Call Tree Data**

| Category            | Percentage |
|---------------------|------------|
| Radiology Scheduled | 57%        |
| Reception           | 22%        |
| MRI Scheduled       | 17%        |
| Cancel Appointment  | 4%         |

## People Review

Misuse of a scheduler's available time due to trying to correct deficiencies, lack of patient compliance and incorrect physician orders

### Incoming calls vs disconnects

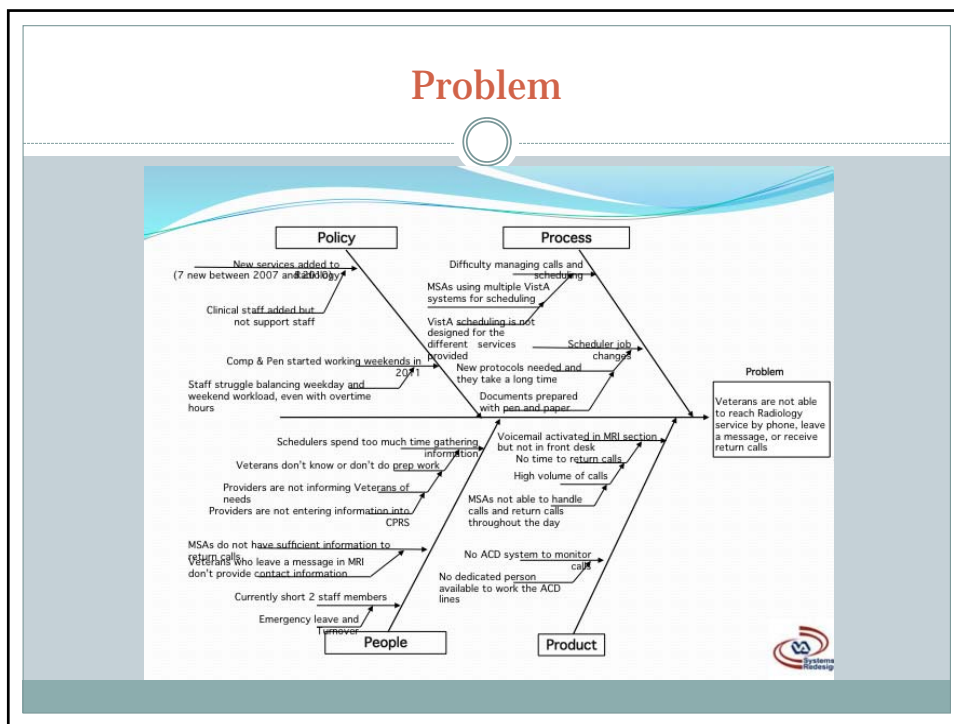
| Category    | September | October |
|-------------|-----------|---------|
| Total Calls | 2,901     | 3,969   |
| Disconnects | 1,950     | 3,501   |

### Incorrect orders vs correct procedure

| Key Word in History | Correct Procedure to Order/Schedule | Incorrect Orders made by Physicians |
|---------------------|-------------------------------------|-------------------------------------|
| Pseudoaneurysm      | Non-invasive, Lower Extremity Art   | Non-invasive Low Ext Art            |
| Parotid Cyst        | Soft Tissue Head/Neck               | Echogram other unlisted             |
| Polycystic Ovaries  | Pelvic-B Scan &/or Real Time        | Echogram other unlisted             |
| Hand/Finger         | Bone                                | Echogram other unlisted             |
| Renal Arteries      | Retroperitoneal                     | Echogram other unlisted             |

## Product Review

- No Automatic Call Distributors (ACD) system
- No call data monitoring
- No voicemail services at the front desk
- Not enough time to return calls



- ### Changes in: process procedures people and policies
- Phone monitoring to collect call-data
  - Use of ACD phones to improve the system
  - Electronic protocolling process to improve functionality and efficiency of staff
  - New staff to balance increasing workload
  - Cover sheets for protocols
  - Template letters for patients

## Call metrics recorded before and after interventions were made

|  | Call Delay | Call Abandonment Rate |
|--|------------|-----------------------|
| Target                                     | <1min      | <10%                  |
| February 2013                              | 6min 15sec | 21.99%                |
| October 2013                               | 1min 30sec | 13.03%                |
| Percent decrease February to October 2013  | 76%        | 8.97%                 |
| July 2015                                  | 49sec      | 7.75%                 |
| Percent decrease from October to July 2015 | 10.93%     | 5.28%                 |
| Total % decrease from February 2013        | 86.93%     | 16.71%                |

## Results

- Telephone abandonment percent dramatically decreased:
  - ✦ from 21.99% in February 2013
  - ✦ to 13.03% in October 2013
- Call delay dramatically decreased
  - ✦ from 6:15 February 2013
  - ✦ to 1:30 in October 2013
- Total abandonment rate of 7.75% in July 2015
- Total call delay of 49 seconds in July 2015

## Conclusion

- Monitoring and analysis of incoming phone calls for scheduling Radiology procedures as well as review of associated policy, people, process, and products with revision where it is needed results in sustainable improvements in telephone access of patients to Radiology services.