



**800-015-04-F: QI PROJECT WORKSHEET FORM**

<b>Division / Program / Process Area:</b> Department Wide / All Divisions		<b>Program / Process Manager:</b> Health Commissioner / Division Leaders		
<b>Project Title:</b> Phone Answering and Routing				
<b>TEAM DETAILS</b>				
<b>Project Team Members:</b>				
<b>Member Need/Responsibility</b>	<b>Name</b>	<b>Title</b>	<b>Level</b>	<b>Division</b>
QIPT Consultant / Fresh Perspective	Heather Macdonald	Lab Technician	Non-Management	Lab
Subject Matter Expert	Ashley Archer	WIC Assistant	Non-Management	WIC
Subject Matter Expert	Connie Standard	PH Clerk I	Non-Management	Nursing
Subject Matter Expert	Jil Neuman	PH Clerk I	Non-Management	VS
Subject Matter Expert	Connie Ash	PH Clerk I	Non-Management	EH
QIPT Consultant Helper/ Timekeeper	Terri Dzienis	APC Director	Management	APC
<b>Note taker/Scribe:</b>		Terri Dzienis		
<b>Meeting Frequency and Duration:</b> Planned 2 meetings at 3.5 hours each for planning then short check/act meeting after improvement. Will handle improvement implementation via email.				
<b>PROJECT SCOPE</b>				
<b>Project Objectives:</b> Reduce calls to incorrect division Reduce time of caller on phone with wrong staff Reduce time spent on process by all staff Improve customer & employee satisfaction Simplify main line auto-attendant				
<b>Background (<i>what is the problem, strategic importance, importance to customer</i>):</b> There are five main phones lines (HD, APC, EH, NUR, WIC) that customers can call to reach the department (4 of which are division specific); this causes confusion for customers since they end up calling the wrong number/division. When calls are received for the wrong division or at the HD main line, calls are transferred to the division main lines so the clerks can talk to the caller and then transfer them to their destination, creating multiple transfers per call. There are auto-attendants on both the HD main and APC main lines, but not the other 3 lines. The HD main Auto attendant has a really long introduction message and callers seem to choose the wrong option. Some calls are transferred to wrong person or division. These scenarios cause both staff (internal customer) and caller (external customer) frustration and dissatisfaction. Improving customer and staff satisfaction are both strategic priorities.				



<b>Boundaries (limits on scope of process change allowable by Process Manager, legal restrictions, budget, etc.):</b> Nursing: HIPAA concerns of what can be shared and who it can be shared with Overall: Improvement without costing money	
<b>Process Scope</b>	<b>First Step in the process (to be included in project):</b> Call received/Phone rings
	<b>Last Step in the process (to be included in project):</b> Call gets to end user / Caller gets to where they needed
<b>What team has authority to do:</b> <input checked="" type="checkbox"/> Implement improvement <input type="checkbox"/> Make recommendations to process owner prior to implementation	
<b>Project Start Date:</b>	8/18/2017
<b>Estimated End Date:</b>	12/31/2017
<b>Link to where project documents are stored:</b> L:\ALL\Staff Committees\Quality Improvement\QI Projects\2017\QI Project Phone Routing	
<b>PLAN PHASE</b>	
<b>Date(s) of team planning meetings:</b>	8/18/2017, 8/25/2017, and 9/29/2017
<b>Describe the current process (if process mapping and/or SIPOC QI tools were used, attach photo):</b> There are five main phones lines (HD, APC, EH, NUR, WIC) that customers can call to reach the department (4 of which are division specific); There are auto-attendants on both the HD main and APC main lines, but not the other 4 lines. There are 9 staff that answer these 5 phones lines. If calls are received that require transferring to another division, the staff transfer to other phone answering staff instead of the end destination/user. There is also the potential for loop-back for incorrectly transferred calls. Process mapping and SIPOC QI Tools used - See attached photos	
<b>Describe the problem / situation:</b> HD main Auto attendant is too long. Callers seem to choose the wrong option on the auto-attendant. Some calls are transferred to wrong person or division. If transferred to voicemail, calls can loop back to main number if caller presses 0. Callers ask the same questions over and over (WIC). Calls come in for other Health Departments or Building Code. Clerks that answer phones do not know if a person is out of the office. Callers are unhappy to get voicemail. Calls for information or external agency numbers. Callers have more than one request that needs answered by more than one division/person. Transfers to clerk to clerk instead of end users.	
<b>Process customers / stakeholders (both internal and external):</b> Internal: Employees (both phone answering staff and staff that the caller need to reach) External: Callers; other Agencies	
<b>What baseline data will you use? Does this data exist?</b> Received Call logs from phone system provided by IT for the five main numbers to provide call volume, which is existing data. Data for the types of calls received (for wrong division/agency, caller requests, etc) to define problem does not exist.	

**What customer satisfaction data exist? If yes, what does the data say?**

No specific customer satisfaction data has been collected previously.  
Clerks have experience with callers stating they want to talk to a live person or they don't want voicemail, but don't have data for how often this occurs.

**If baseline data doesn't exist, develop and describe baseline data collection plan:**

The team developed a data collection form for all staff required to answer one of the 5 main phone lines to tally calls for one week that fit into the following categories: Calls received for the incorrect Health Department; Calls received for the incorrect Division; callers requesting to talk to a live person; callers complaining about the number of people they have talked to; calls transferred to another division's clerk; calls transferred to final person in another division. These categories were selected as the highest priority issues to define with data.

Received Call logs from phone system for the five main numbers will be provided by IT to provide call volume for the same one week, and this will be used to produce rate data (# for category divided by total calls received) for the categories.

Raw data will be entered into an Excel spreadsheet for analysis

Collect the baseline data for one week that is representative of normal operations: 9/15/18-9/22/18

<b>Develop and list draft Performance Metrics: What measures will tell you if you are successful?</b>	<b>Performance Metrics</b>		<b>Baseline Data? (Y/N)</b>
	<b>Current</b>	<b>Goal</b>	
# or rate of customer complaints with "you are the 3 <sup>rd</sup> person I have talked to"	See below table	Any decrease	Y 9/15-22/18
# or rate of calls to wrong HD	See below table	Any decrease	Y 9/15-22/18
# or rate of calls to incorrect Divisions	See below table	Any decrease	Y 9/15-22/18
# or rate of calls transferred to other clerks or to end user	See below table	Any decrease	Y 9/15-22/18
# or rate of callers requesting to talk to a live person (no voicemail)	See below table	Any decrease	Y 9/15-22/18
Length of time/# of selections on main line auto-attendant	See below table	Any decrease	Y 9/15-22/18

**List contributing factors and root cause(s) to the problem and describe what QI tools were used:**

Auto selection too long and not pertinent  
Underutilization of technology - no Auto Attendant for WIC and EH  
Extensions/direct dial numbers for staff are not provided directly to customers or posted for all to use  
Calls are transferred clerk to clerk instead of to end user  
Clerks don't know who is off work to inform caller and know proper transfer location  
Call buttons on phones are outdated – have old employee names or ext that are not commonly needed  
Callers provide too much information to clerks extending the calls; but clerks don't know how to handle  
Calls received for general info - we are listed as Public Information in the phone book  
Employee voicemail messages say to "dial 0 for operator" so clerks get calls they can't handle  
Dental phone go direct to voicemail instead of ringing phone

**Tools used:** SIPOC, Process Mapping, Tim U Wood, 4 Voices, Value Added, Brainstorming, and 5 Whys.

**List potential improvement strategies and describe what QI tools were used:**

Create/Update internal routing list – list of end user responsibilities  
 Add Auto attendant for WIC and EH  
 Provide copy of commonly requested external #'s list to all clerks  
 Out of office for more than one day list  
 Update HD main auto attendant – simplify, shorten intro, add option for lab, change end City message  
 Define policy on providing direct dial phone #'s on letters, emails, website and exceptions  
 Add website contact list for certain divisions  
 Develop cheat sheet for clerks to provide answers to common questions  
 Update phone button labels on clerks phones  
 Update phone book so it doesn't say "public info" for HD main line  
 Update voicemail instructions to remove use of "dial 0 for operator" statement  
 Research having only one phone number for entire department (eliminate division lines).  
 Reprogram dental phone to ring instead of go to voicemail  
**Tools used:** Brainstorming

**Select improvement strategy (and any associated costs) and describe what QI tools were used to make decision:**

Create/Update internal routing list – list of end user responsibilities  
 Add Auto attendant for WIC and EH  
 Provide copy of commonly requested external #'s list to all clerks  
 Out of office for more than one day list  
 Update HD main auto attendant – simplify, shorten intro, add option for lab, change end City message  
 Define policy on providing direct dial phone #'s on letters, emails, website and exceptions  
 Add website contact list for certain divisions  
 Develop cheat sheet for clerks to provide answers to common questions  
 Update phone button labels on clerks phones  
 Update phone book so it doesn't say "public info" for HD main line  
 Update voicemail instructions to remove use of "dial 0 for operator" statement  
 Research having only one phone number for entire department (eliminate division lines).  
**Costs:** No associated costs with any of the above strategies (except for staff time).  
**Tools used:** Impact/Control Matrix

**Link to where the 800-015-05-F QI Project Action Plan is stored (without actual completion dates):**

L:\ALL\Staff Committees\Quality Improvement\QI Projects\2017\QI Project Phone Routing

**Process efficiency measures of success:**

	Current State	Improved State
<b>Process Steps (yellow+green)</b>	11	Same (no steps reduced)
<b>Decisions (blue)</b>	2	Same (no steps reduced)
<b>Delays (hot pink)</b>	1	Same (no steps reduced)
<b>NVA-Waste steps (salmon)</b>	0	Same (no steps reduced)
<b>Process time (start to stop)</b>	variable	Variable
<b>Paper reduction</b>	N/A	N/A

<b>Develop/refine and list process outcome/performance measures of success:</b>		
	Current State	Improved State
Average Rate of incorrect calls transferred another division clerk per total calls	HD = 2.0%    EH = 0% WIC = 0%    NUR = 1.3% APC = 0%	HD = 9.6%    EH = 0% WIC = 0.8%    NUR = 0.6% APC = 0%
Average Rate of incorrect calls transferred another division clerk per total incorrect calls	HD = 29.0%    EH = 0% WIC = 0%    NUR = 50.0% APC = 0%	HD = 53.9%    EH = 0% WIC = 0%    NUR = 0% APC = 0%
Average Rate of incorrect calls transferred another division final person per total calls	HD = 7.0%    EH = 8.1% WIC = 0%    NUR = 1.1% APC = 1.3%	HD = 6.4%    EH = 2.3% WIC = 0.8%    NUR = 0% APC = 0%
Average Rate of calls received for incorrect division per total calls	HD = 8.4%    EH = 7.3% WIC = 0.4%    NUR = 3.5% APC = 1.3%	HD = 17.4%    EH = 0.5% WIC = 0%    NUR = 0% APC = 0%
Average Rate of calls received for incorrect Health Dept per total calls	HD = 2.6%    EH = 2.0% WIC = 5.8%    NUR = 2.0% APC = 0%	HD = 1.5%    EH = 0.4% WIC = 0%    NUR = 0% APC = 0%
Average Rate of callers requesting to talk to a live person per total calls	HD = 0.9%    EH = 2.2% WIC = 0%    NUR = 0% APC = 0%	HD = 0.5%    EH = 3.4% WIC = 0.2%    NUR = 0% APC = 0%
Average Rate of callers complaining about # of people talked to per total calls	HD = 0%    EH = 0% WIC = 0%    NUR = 0% APC = 0%	HD = 0.3%    EH = 0% WIC = 0%    NUR = 0% APC = 0%
<b>Develop and describe improvement data collection plan:</b>		
Improvement data will be collected exactly as baseline data (see that section for details) so that it is comparable.		
Added an additional category on the tally form to gather information of which phone # was called for those calls for incorrect division.		
<b>DO PHASE</b>		
<b>Implement improvement strategy</b> (conduct key action steps and list any changes made to strategy during implementation):		
All improvements selected were implemented except for a few. Didn't implement Out of office for more than one day list since there isn't an easy way to distribute this information and the attendance system is currently changing. Didn't update phone book since we weren't sure who to contact; will still continue to pursue this improvement. Didn't update voicemail instructions since phone system is changing within the year and will provide updated instructions.		
Significant delays with this Do phase due to issues with phone line infrastructure (i.e. phone service provider changed in October 2017 causing numerous phone line/system inoperability issues). Delay also occurred during the 1 <sup>st</sup> attempt at collecting improvement data (on 7/17/2018-7/23/2018) when the phone system calls received recording was not working, which required IT to repair the recording feature so the data would be available for the data collection event.		

<b>Describe which division/process areas implemented the improvement strategy:</b>	
All divisions were involved.	
<b>Costs incurred to CCPH for the implemented the improvement strategy:</b>	
None	
<b>Link to where the updated 800-015-05-F QI Project Action Plan is stored (with actual completion dates):</b>	
L:\ALL\Staff Committees\Quality Improvement\QI Projects\2017\QI Project Phone Routing	
<b>CHECK PHASE</b>	
<b>Date(s) Improvement data was collected:</b>	10/1/2018 thru 10/5/2018
<b>Date(s) Check meetings conducted:</b>	10/12/2018
<b>Study the results (list improved state data above). What does the data indicate?</b> <ul style="list-style-type: none"> <li>• Rate of callers requesting to talk to a live person went up – group thinks this is because they don't want to deal with the auto-attendant or don't want voicemail since they think their call is important</li> <li>• Calls received for incorrect division was improved for division lines but worsened for HD main line</li> <li>• For nursing: the week improvement data was collected didn't have any calls to tally, but this week has a lot, which indicates a long time period may be needed to collect data.</li> <li>• Per clerk experience, the majority of calls on the HD main line for an incorrect division transfer to clerk are for EH – since no sanitarians are in the office, the call needs to be directed to the clerk. <ul style="list-style-type: none"> <li>○ Maybe there should be staff in EH designated to answer questions to avoid this (already done in Nursing).</li> </ul> </li> <li>• Per clerk experience, there are some issues with the EH auto-attendant: when calling individual sanitarians, go direct to voicemail instead of ring phone</li> <li>• There is speculation of HD main auto-attendant issues: that callers press zero to avoid listening to the auto-attendant or that get our number thinking we are someplace else; different understanding of the words we used on the auto-attendant so they select the wrong option; not every program needs to be an option on the auto-attendant, so maybe remove Epidemiology since misunderstood <ul style="list-style-type: none"> <li>○ We need data of caller behavior to know factually what is occurring (like the phone # the caller called, how they got that #, who they wanted, what option they chose on the auto-attendant, etc.)</li> </ul> </li> <li>• Some staff are now receiving incorrect calls they never got before (Lab, Amanda Archer)</li> <li>• Staff have been using their direct dial phone numbers on their correspondence, but don't know if people are calling those numbers (no data collected for this).</li> <li>• Overall not an improvement for HD main line but improvement for division lines; indicating a shift of calls from the divisions to the HD main line or sub-optimization</li> </ul>	
<b>List any QI Tools or data analysis tools used to evaluate data:</b>	
Excel spreadsheet to calculate rate data and bar/run charts to compare baseline and improvement data.	
<b>ACT PHASE</b>	
<b>Date(s) Act/Conclusion meetings conducted:</b>	10/12/2018

**Describe what action you will take:**

1. **Adopt the change**
2. **Adapt the change and repeat the cycle** (if selected, submit project proposal for next cycle)
3. **Abandon the project**

Group decided to Adapt the change – they will keep what we have implemented so far since some improvement had occurred, but further improvement is needed on the HD main auto-attendant. The further improvements (the 2<sup>nd</sup> PDCA cycle) will be part of a new separate project. This project (for the 1<sup>st</sup> PDCA cycle) is considered complete.

**Describe the key lessons learned (two to three):**

Calls for WIC asking general questions went down to zero, since answers are now on auto-attendant  
Need caller customer input data in order to customize auto-attendant for even more improvement

**List any measure that will continue to be tracked, frequency, and who will track the measure (this will be added to the PMS):**

None

**List process efficiencies gained as a result of this implemented improvement (and update the metrics listed in the “Plan” section of the improved state):**

Number of calls answered by Connie Ash (EH Clerk) have reduced due to the EH auto-attendant.  
Number of calls answered by WIC have reduced due to the WIC auto-attendant.

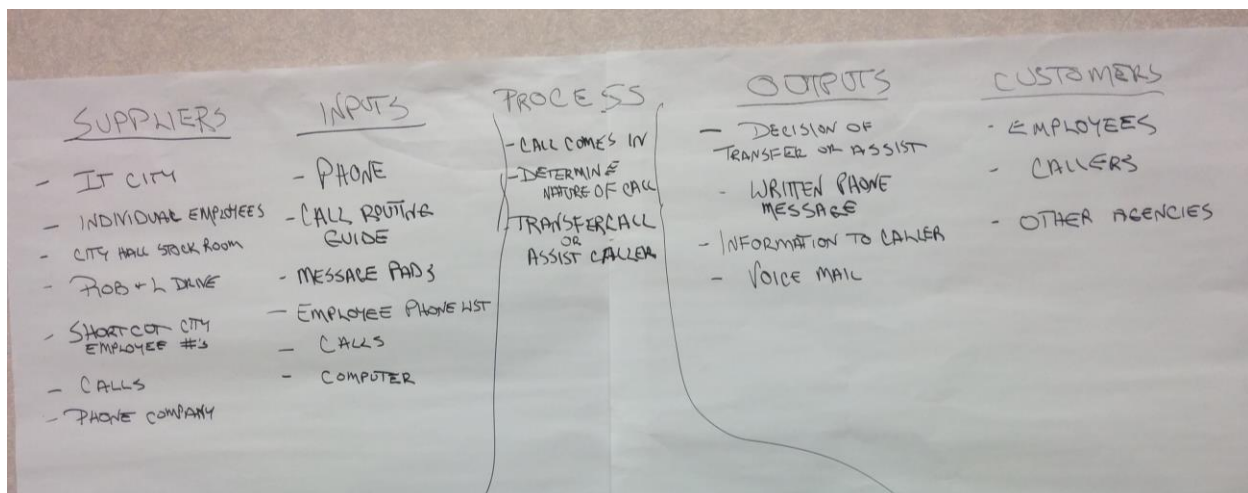
**List how the cost savings and/or personnel time savings gained from the improvements will be used (e.g. new computers, time for additional services, etc) (consultation with the leadership team may be needed to complete this):**

Staff that are answering less calls are able to focus on completing other assigned tasks.

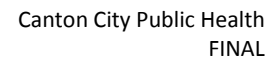
**Project End Date:** 10/12/2018

**ATTACH BELOW PHOTOS OF QI TOOLS USED AND PROJECT WORK COMPLETED**

**SIPOC:**





[illegible]

# ISSUES

- ① Callers choose wrong auto selection
  - Callers have more than one request that need answered by more than one Division
- ② Get calls for general info (SSN) how to get privacy, etc)
  - Ask of making complaint or building code
  - Auto selection too long
  - If a caller has question for external dept, some Divisions handle info & some don't
- ③ Transfer from Clerk to Clerk instead of end user
  - Clerks don't know for SSRS if call is coming to right place
  - Clerks don't want to come out to their staff
  - Callers don't want to leave a message
- ④ Callers think they will get a live person but they get someone who isn't ~~trained~~ <sup>trained</sup> ~~staff~~ <sup>staff</sup> ~~person~~ <sup>person</sup> ~~etc~~ <sup>etc</sup>
- ⑤ Callers don't know person's extension
- ⑥ Auto-aid phone book
  - Callers don't check recent regularly - or return calls
  - Some callers say a company already, clerks need to verify person
  - And person says OK, Clerk says OK, what call, instead of verifying call making call
  - End person is not there then clerk tells call so no real help of getting
- ATTENDANCE - WHO IS OFF?
  - VOicemail messages not convenient (hard to hear, don't go up often)
- PHONE BOOK GOVERNMENT PAGES - LISTS 3327 AS PUBLIC INFORMATION

## FOOTNOTES

- ① Auto Selection never too long - not pertinent  
↳ too generic (don't want to hear)
- ② Calls for general info  
↳ because we are listed in phone book as public info (for other reasons)  
↳ like - we listen
- ③ Transfer from Clerk to Clerk instead of end user  
↳ why? Don't know where to call or ask for during  
↳ Listen. Value to be experienced going to Not doing more
- ④ Why Clerks need to inform them they might have to leave a message?
- ⑤ Why Not put policy department  
↳ why? Not prioritized in letter (need to be direct) <sup>selection</sup>  
↳ why? Policy is hard to write known? (Clerks have work)  
↳ This thing apply to some still in but not all
- ⑥ One person responsible to someone's business  
↳ Phone Book page 3327
- ⑦ Transfer Call - is a drawback of technology  
↳ By phone number to have answered

## Auto Selection

instead of EFT

- ↳ for initial and complaint
- ↳ Food service
- ↳ water, gas to missing

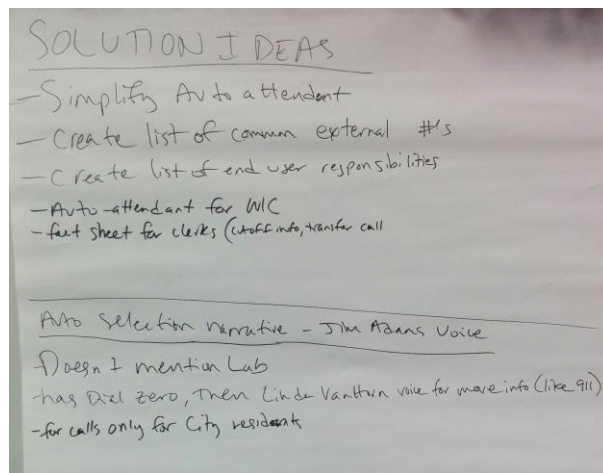
## Answer Greeting

How can I direct your call?

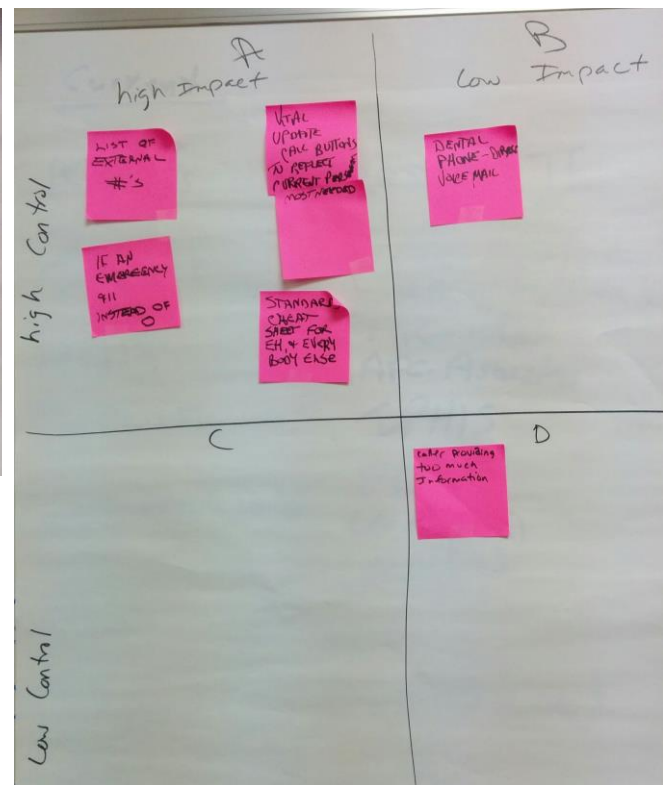
↳ already in Cost Svc policy



### Improvement Ideas Brainstorm:



### Impact-Control Matrix:



### Data Analysis Bar/Run Charts:

