Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: CV Offline Case Management Enhancement   **Project ID: D51177MR**

Leadership Group: Courts/Criminal Justice		
Department: Health and Human Services	**Division:** Children's Village	
Project Sponsor: Joanna Overall	**Date Requested:** 02/21/20	**PM Customer No.** 177
Request Type: _**New Development**_ _Enhancement_ _Customer Support_ _Planned System Maintenance or Upgrade_		
IT Team Name: Public and Environmental Services	**IT Team No:** 5	
Project Manager/Leader: Stu Smith		
Account Number: 95665 **Account Description:** Children's Village		**Customer Name:** Children's Village
Grant Funded? No	**Mandate?** No **Mandate Source:**	

Project Goal

To implement and utilize an application that can record patient information, as well as integrate with the existing case management application so that current manual documentation can be replaced by a more reliable, accurate, and secure method.

Business Objective

To implement an improved method of documenting required resident information that will be utilized at the time of arrival in order to update the existing Case Management system. The use of technology options in order to reduce or eliminate the need for paper documentation, reduce or eliminate the need for duplicate data entry, and improve the security of patient data.

Major Deliverables
- Detailed Project Plan
- Application and/or System Requirements
- End User Hardware and Software Requirements Document
- Technical Design Document
- Technical Architecture Diagram
- Training Plan
- User Acceptance Test Plan
- Implementation Plan
- Training/User Manual(s)
- Application Code
- Service Level Agreement
- Disaster Recovery Toolkit
- Service Center Knowledge Documents

Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: CV Offline Case Management Enhancement   **Project ID: D51177MR**

Approach
- Develop Detailed Project Plan
- Review current business process and conduct needs assessment with customer, ensuring current manual processes are refined and automated.
- Document system requirements
- Determine and document system architecture and diagram
- Assess User Hardware and Software Requirements
- Conduct Tech Review
- Develop Implementation Plan
- Develop new system
- Develop User Acceptance Test Plan
- Test new system
- Acquire User Acceptance Sign off
- Conduct Change Control
- Develop User Documentation, SLA, Disaster Recovery Toolkit, Service Center Knowledge Documents
- Train users on new system
- Release new system into production

Research & Analysis

Gartner Research Recommendation

Gartner research provided suggestions on what criteria to review when considering implementing an Electronic Health Record (EHR) system. The first is to have a strategic plan for clinical automation using the Generation model to ensure solution is patient-care focused. Second is to incorporate the model as part of the new application evaluation and ensure the solution meets the requirements of the strategic plan and clinical automation. Finally, there is a strong suggestion to ensure that all senior leadership and stakeholders are comfortable with the selection to facilitate buy-in of new technology at all levels.

Benefits

See Return on Investment (ROI) Analysis Document

Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: CV Offline Case Management Enhancement   **Project ID: D51177MR**

Impact

Number of Users   20

Divisions   Children's Village

Leadership Groups   Courts

Risk

Business Environment   MEDIUM - Project will require some changes to existing business processes

.

Technical Environment   MEDIUM - Previously implemented technologies with new aspects and/or new requirements.

Assumptions

Staffing   IT Staffing: resources will be available for the hours indicated per the attached project plan.

        Other Staffing: additional staffing will be available as follows:

Role:	Name	Hours per Day
Project Sponsor	Joanna Overall	As Needed
Business Process SME	Nichole Brian	As Needed

Facilities

-

Technical

- Utilize available NextStep Solutions App (NSS APP)

Funding

-

Project Name: CV Offline Case Management Enhancement   **Project ID: D51177MR**

Other

-

Priority

Constraints

Exclusions

-          Mobile device acquisition is not included in this project.

Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: CV Offline Case Management Enhancement   **Project ID: D51177MR**

PROJECT PHASE AUTHORIZATION

Phase(s):			
Total Estimated Application Services	**Hours: 211**		
Total Estimated Technical Systems	**Hours: 23**		
Total Estimated CLEMIS	**Hours:**		
Total Estimated Internal Services	**Hours:**		
IT Application Services Division Manager Approval:		**Date:**	
IT Technical Systems Division Manager Approval:		**Date:**	
IT CLEMIS Division Manager Approval:		**Date:**	
IT Internal Services Division Manager Approval:		**Date:**	
IT Management Approval:			
Approved:	Yes	No	Date:
Reason:			
Project Sponsor Approval:			
Title:		Date:	

PROJECT SUMMARY

Authorized Development (see above)	**Hours:**		
Preliminary Estimated Development for Future Phases	**Hours:**		
Grand Total Estimated Development	**Hours: 234**	**Cost: $38,610**	

Project Name: CV Offline Case Management Enhancement   **Project ID: D51177MR**

PROJECT COMPLETION AUTHORIZATION

Customer Acceptance of Product:	
Title:	Date:
Project Office Review:	Date:

CV Offline Case Management Enhancement - Size Estimate (+/- 10% to 50%)

Type	ID	Task Name	Estimated
			Hours
3	000000	PROJECT MANAGEMENT	79
Phase	100000	DEVELOP RFP & SELECT VENDOR	
Phase	200000	DEFINE BUSINESS REQUIREMENTS	29
Phase	300000	DESIGN SYSTEM ARCHITECTURE	43
Phase	400000	IMPLEMENT VENDOR APPLICATION	69
Phase	500000	IMPLEMENTATION PHASE	12
Phase	600000	POST IMPLEMENTATION SUPPORT	2
			234

Oakland County -- CV Offline Case Management Enhancement

Date: 06/15/2020

Return on Investment Analysis

Project Summary

Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Benefits/Savings:							
Tangible Benefits Subtotal:	0	0	0	0	0	0	0
Cost Avoidance Subtotal:	0	0	0	0	0	0	0
Costs:							
Development Services Subtotal:	41,910	6,666	3,366	6,800	3,434	6,937	69,113
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	17,820	17,820	17,820	17,820	17,820	17,820	106,920
Infrastructure Subtotal	0	0	0	0	0	0	0
Training Subtotal:	0	0	0	0	0	0	0
Other Subtotal:	0	0	0	0	0	0	0
Annual Statistics:							
Annual Total Savings	0	0	0	0	0	0	0
Annual Total Costs	59,730	24,486	21,186	24,620	21,254	24,757	176,033
Annual Return on Investment	(59,730)	(24,486)	(21,186)	(24,620)	(21,254)	(24,757)	(176,033)
Annual Costs/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Project Cumulative Statistics:							
Cumulative Total Savings	0	0	0	0	0	0	0
Cumulative Total Costs	59,730	84,216	105,402	130,022	151,276	176,033	176,033
Cumulative Return on Investment	(59,730)	(84,216)	(105,402)	(130,022)	(151,276)	(176,033)	(176,033)
Cumulative Cost/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Year Positive Payback Achieved							NO PAYBACK
State or Federal Mandate?							
Signatures:							
Benefits Reviewed By Project Sponsor				Date:			
Costs (including IT Resources) Reviewed By Information Technology Project Manager				Date:			

Oakland County -- CV Offline Case Management Enhancement

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Savings	Annual Multiplier
Improved accuracy of patient medical records by reducing manual entry.	Intangible Benefit					0	
Improved efficiency of Children's Village staff by reducing manual entry.	Intangible Benefit					0	
Improved security and retention of confidential resident data.	Intangible Benefit					0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	

Oakland County -- CV Offline Case Management Enhancement

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Affects Project ROI?						Potential Savings Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6	Y1	Y2	Y3	Y4	Y5	Y6
Improved accuracy of patient medical records by reducing manual entry.	Intangible Benefit												
Improved efficiency of Children's Village staff by reducing manual entry.	Intangible Benefit												
Improved security and retention of confidential resident data.	Intangible Benefit												

Oakland County -- CV Offline Case Management Enhancement

Return on Investment Analysis

Savings Summary

	Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Tangible Benefit:								
	Tangible Benefits Subtotal:							
Cost Avoidance:								
	Cost Avoidance Subtotal:							
Intangible Benefit:								
	Improved accuracy of patient medical records by reducing manual entry.							
	Improved efficiency of Children's Village staff by reducing manual entry.							
	Improved security and retention of confidential resident data.							
Savings Total:								

Oakland County -- CV Offline Case Management Enhancement
Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?					
								Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs			234	165	38,610		x					
IT Hours - System Maintenance	Development Svcs			10	165	1,650	1.010	x	x	x	x	x	x
IT Hours - Customer Support	Development Svcs			10	165	1,650	1.010	x	x	x	x	x	x
IT Hours - Planned Maintenance	Development Svcs			20	165	3,300	1.010		x		x		x
User Hours - New Development	Development Svcs					0							
User Hours - PTNE/OT	Development Svcs					0							
Contractor Professional Services	Development Svcs					0							
PC System - Acquisition	Hardware				687	0							
PC System - Maintenance	Hardware				2,936	0							
Notebook - Acquisition	Hardware				1,115	0							
Notebook - Maintenance	Hardware				3,024	0							
Tablet Notebook - Acquisition	Hardware				1,421	0							
Tablet Notebook - Maintenance	Hardware				2,800	0							
Laserprinter - Acquisition	Hardware				1,432	0							
Laserprinter - Maintenance	Hardware				1,408	0							
PC Maintenance User Owned	Hardware				2,720	0							
Printer Maintenance User Owned	Hardware				1,264	0							
File Space (100GB)	Hardware		ANN		23	0							
Package Software - Acquisition	Software					0							
Package Software - Maintenance	Software			180	99	17,820		x	x	x	x	x	x
Business Objects Access	Software					0							
Term Emulation SFTW-Acquisition	Software					0							
Term Emulation SFTW-Maintenance	Software					0							
Server - Acquisition/Upgrade	Infrastructure				8,000	0							
Server - Maintenance	Infrastructure				360	0							
Server Sftwre - Acquisition/Upgrade	Infrastructure				335	0							
Server Sftwre - Maintenance	Infrastructure					0							
Server Rack Mount	Infrastructure				400	0							
Oracle Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure				21,372	0							
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure				3,432	0							

Oakland County -- CV Offline Case Management Enhancement

Date: 06/15/2020

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?					
								Y1	Y2	Y3	Y4	Y5	Y6
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure				24,533	0							
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure				20,759	0							
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure				16,985	0							
SQL Server Enterprise - Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure				4,218	0							
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure				6,398	0							
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure				5,414	0							
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure				4,429	0							
SQL Server - Standard Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure				1,100	0							
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				3,506	0							

Oakland County -- CV Offline Case Management Enhancement

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?					
								Y1	Y2	Y3	Y4	Y5	Y6
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				701	0							
Websphere ND Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				13,180	0							
Websphere ND Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				2,635	0							
SSL Certificate	Infrastructure				845	0							
Internet Access	Infrastructure				180	0							
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure		ANN		500	0							
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure		ANN		415	0							
Database (5 GB) on Consolidated SQL Instance Server	Infrastructure		ANN		930	0							
Database Instance (125 GB DB) on Consolidated SQL Server	Infrastructure		ANN		2,395	0							
Database SQL Maint Server	Infrastructure		ANN		834	0							
Database SQL Server Physical	Infrastructure		ANN		19,158	0							
DB Maintenance (Annual Cycle $610)	Infrastructure		ANN		610	0							
DB Maintenance (Semi-Annual Cycle $1220)	Infrastructure		ANN		1,220	0							
DB Maintenance (Semi-Annual Cycle $2440)	Infrastructure		ANN		2,440	0							
Dedicated Virtual Server	Infrastructure		ANN		4,150	0							
DB Instance Setup	Infrastructure				976	0							
DBA MS SQL Database Creation on Exisitng Instance	Infrastructure				366	0							
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $601 On Premise Physical Server = N/A	Infrastructure		ANN			0							

Oakland County -- CV Offline Case Management Enhancement

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?					
								Y1	Y2	Y3	Y4	Y5	Y6
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $951 On Premise Physical Server = $9,288	Infrastructure		ANN			0							
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $1,702 On Premise Physical Server = $9,751	Infrastructure		ANN			0							
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $3,167 On Premise Physical Server = $10,446	Infrastructure		ANN			0							
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $7,564 On Premise Physical Server = $12,906	Infrastructure		ANN			0							

Oakland County -- CV Offline Case Management Enhancement

Date: 06/15/2020

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs	38,610.00					
IT Hours - System Maintenance	Development Svcs	1,650.00	1,666.50	1,683.17	1,700.00	1,717.00	1,734.17
IT Hours - Customer Support	Development Svcs	1,650.00	1,666.50	1,683.17	1,700.00	1,717.00	1,734.17
IT Hours - Planned Maintenance	Development Svcs		3,333.00		3,399.99		3,468.33
User Hours - New Development	Development Svcs						
User Hours - PTNE/OT	Development Svcs						
Contractor Professional Services	Development Svcs						
PC System - Acquisition	Hardware						
PC System - Maintenance	Hardware						
Notebook - Acquisition	Hardware						
Notebook - Maintenance	Hardware						
Tablet Notebook - Acquisition	Hardware						
Tablet Notebook - Maintenance	Hardware						
Laserprinter - Acquisition	Hardware						
Laserprinter - Maintenance	Hardware						
PC Maintenance User Owned	Hardware						
Printer Maintenance User Owned	Hardware						
File Space (100GB)	Hardware						
Package Software - Acquisition	Software						
Package Software - Maintenance	Software	17,820.00	17,820.00	17,820.00	17,820.00	17,820.00	17,820.00
Business Objects Access	Software						
Term Emulation SFTW-Acquisition	Software						
Term Emulation SFTW-Maintenance	Software						
Server - Acquisition/Upgrade	Infrastructure						
Server - Maintenance	Infrastructure						
Server Sftwre - Acquisition/Upgrade	Infrastructure						
Server Sftwre - Maintenance	Infrastructure						
Server Rack Mount	Infrastructure						
Oracle Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure						
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure						

Oakland County -- CV Offline Case Management Enhancement

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server - Standard Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure						
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure						

Oakland County -- CV Offline Case Management Enhancement

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure						
Websphere ND Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure						
Websphere ND Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure						
SSL Certificate	Infrastructure						
Internet Access	Infrastructure						
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure						
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure						
Database (5 GB) on Consolidated SQL Instance Server	Infrastructure						
Database Instance (125 GB DB) on Consolidated SQL Server	Infrastructure						
Database SQL Maint Server	Infrastructure						
Database SQL Server Physical	Infrastructure						
DB Maintenance (Annual Cycle $610)	Infrastructure						
DB Maintenance (Semi-Annual Cycle $1220)	Infrastructure						
DB Maintenance (Semi-Annual Cycle $2440)	Infrastructure						
Dedicated Virtual Server	Infrastructure						
DB Instance Setup	Infrastructure						
DBA MS SQL Database Creation on Exisitng Instance	Infrastructure						
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $601 On Premise Physical Server = N/A	Infrastructure						

Oakland County -- CV Offline Case Management Enhancement

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $951 On Premise Physical Server = $9,288	Infrastructure						
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $1,702 On Premise Physical Server = $9,751	Infrastructure						
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $3,167 On Premise Physical Server = $10,446	Infrastructure						
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $7,564 On Premise Physical Server = $12,906	Infrastructure						

Oakland County -- CV Offline Case Management Enhancement

Date: 06/15/2020

Return on Investment Analysis

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Development Services:							
IT Hours - New Development	38,610						38,610
IT Hours - System Maintenance	1,650	1,667	1,683	1,700	1,717	1,734	10,151
IT Hours - Customer Support	1,650	1,667	1,683	1,700	1,717	1,734	10,151
IT Hours - Planned Maintenance		3,333		3,400		3,468	10,201
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
Development Services Subtotal:	*41,910*	*6,666*	*3,366*	*6,800*	*3,434*	*6,937*	*69,113*
Hardware:							
Hardware Subtotal:							
Software:							
Package Software - Maintenance	17,820	17,820	17,820	17,820	17,820	17,820	106,920
Software Subtotal:	*17,820*	*17,820*	*17,820*	*17,820*	*17,820*	*17,820*	*106,920*
Infrastructure:							
Infrastructure Subtotal							
Training:							
Training Subtotal:							
Other:							
Other Subtotal:							
Costs Total:	*59,730*	*24,486*	*21,186*	*24,620*	*21,254*	*24,757*	*176,033*

Oakland County -- CV Offline Case Management Enhancement

Return on Investment Analysis

Assumptions

Date	Assumption Description
25-Feb-20	Offline Case Managment/Medical Record must integrate with existing application (NextStep).
25-Feb-20	NextStep has an Offline module that may be acceptable.
27-May-20	NextStep App costs $99 per month per device.
27-May-20	Children's Village looking to supply 18 nurses with app.
29-May-20	Ongoing Support and Planned Maintenance will be performed by the vendor and OCIT
29-May-20	System Maintenance reduced from standard since Vendor will perform majority of troubleshooting.
08-Jun-20	Purchase of new hardware is not in scope for this project and not included in cost. Per Gloria Logan, cost is $359 per iPad.
08-Jun-20	InfoSec suggested some sort of MDM to remotely manage the device.