CMS Manual System	Department of Health & Human Services (DHHS)		
Pub 100-20 One-Time Notification	Centers for Medicare & Medicaid Services (CMS)		
Transmittal 1659	Date: May 6, 2016		
	Change Request 9624		

SUBJECT: Convert Assembler Code to COBOL or Best Coding Language to Improve MCS System Maintainability and Sustainability, Analysis only.

**I. SUMMARY OF CHANGES:** The Centers for Medicare & Medicaid Services (CMS) is requesting that Multi-Carrier System (MCS) maintainer begin the process of converting MCS assembler code into COBOL code. The MCS application code base utilizes Assembler, COBOL, Java and PowerBuilder coding languages. Based on a lines of code count, assembler language code makes up approximately 18 percent of the MCS application. At present there are 996 assembler programs that contain nearly 1 million lines of code. There are many benefits to replacing assembler code with COBOL in terms of system maintainability and sustainability.

## EFFECTIVE DATE: October 1, 2016 - Analysis Only

\*Unless otherwise specified, the effective date is the date of service.

IMPLEMENTATION DATE: October 3, 2016 - Analysis Only

Disclaimer for manual changes only: The revision date and transmittal number apply only to red italicized material. Any other material was previously published and remains unchanged. However, if this revision contains a table of contents, you will receive the new/revised information only, and not the entire table of contents.

# II. CHANGES IN MANUAL INSTRUCTIONS: (N/A if manual is not updated)

R=REVISED, N=NEW, D=DELETED-Only One Per Row.

R/N/D	CHAPTER / SECTION / SUBSECTION / TITLE	
N/A	N/A	

## III. FUNDING:

### For Medicare Administrative Contractors (MACs):

The Medicare Administrative Contractor is hereby advised that this constitutes technical direction as defined in your contract. CMS does not construe this as a change to the MAC Statement of Work. The contractor is not obligated to incur costs in excess of the amounts allotted in your contract unless and until specifically authorized by the Contracting Officer. If the contractor considers anything provided, as described above, to be outside the current scope of work, the contractor shall withhold performance on the part(s) in question and immediately notify the Contracting Officer, in writing or by e-mail, and request formal directions regarding continued performance requirements.

### **IV. ATTACHMENTS:**

**One Time Notification** 

## **Attachment - One-Time Notification**

SUBJECT: Convert Assembler Code to COBOL or Best Coding Language to Improve MCS System Maintainability and Sustainability, Analysis only.

EFFECTIVE DATE: October 1, 2016 - Analysis Only

\*Unless otherwise specified, the effective date is the date of service. IMPLEMENTATION DATE: October 3, 2016 - Analysis Only

### I. GENERAL INFORMATION

**A. Background:** The Centers for Medicare & Medicaid Services (CMS) is requesting that Multi-Carrier System (MCS) maintainer begin the process of converting MCS assembler code into COBOL code. The MCS application code base utilizes Assembler, COBOL, Java and PowerBuilder coding languages. Based on a lines of code count, assembler language code makes up approximately 18 percent of the MCS application. At present there are 996 assembler programs that contain nearly 1 million lines of code. There are many benefits to replacing assembler code with COBOL in terms of system maintainability and sustainability.

B. Policy: N/A

## II. BUSINESS REQUIREMENTS TABLE

"Shall" denotes a mandatory requirement, and "should" denotes an optional requirement.

Number	Requirement	Responsibility											
		A/B MAC		MAC M			D M E		•	tem	red- Othe tem ainers		
		A	В	H H H	M	F I	M	V M	C W F				
9624.1	Contractor shall conduct detail analysis of MCS assembler code inventory to determine the state of MCS assembler code.						X						
9624.2	Contractor shall deliver an analysis document by August 1, 2016 which includes the project plan and Quarterly Level of Effort that remediates and converts assembler language to COBOL through incremental changes to MCS per module with clear concise business requirements that can be used for future CMS CRs.						X						
9624.2.1	Contractor shall identify assembler programs and code that are obsolete.						X						
9624.2.2	Contractor shall identify assembler programs and code that are considered unsuitable for conversion to COBOL.						X						

Number	Requirement	Responsibility								
		A/B		D	Shared-				Other	
		N	MAC		M	System				
					Е	Maintainers			rs	
		Α	В	Н		F	M	V	О	
				Н	M	Ι	C	M	W	
				Н	A	S	S	S	F	
					C	S				
9624.2.3	Contractor shall identify assembler programs and code						X			
	that are suitable for conversion to COBOL.									

### III. PROVIDER EDUCATION TABLE

Number	Requirement	Re	Responsibilit			•
			A/B		D	C
		]	MA(	( )	M	Ε
					Е	D
		A	В	Н		I
				Н	M	
				Н	Α	
				11	C	
	None					

## IV. SUPPORTING INFORMATION

Section A: Recommendations and supporting information associated with listed requirements:

<sup>&</sup>quot;Should" denotes a recommendation.

X-Ref	Recommendations or other supporting information:
Requirement	
Number	

Section B: All other recommendations and supporting information: N/A

## V. CONTACTS

**Pre-Implementation Contact(s):** Rae Ann Sprecher-Frey, 410-786-3110 or rae.sprecher-frey@cms.hhs.gov

**Post-Implementation Contact(s):** Contact your Contracting Officer's Representative (COR).

### VI. FUNDING

## **Section A: For Medicare Administrative Contractors (MACs):**

The Medicare Administrative Contractor is hereby advised that this constitutes technical direction as defined in your contract. CMS does not construe this as a change to the MAC Statement of Work. The contractor is not obligated to incur costs in excess of the amounts allotted in your contract unless and until specifically authorized by the Contracting Officer. If the contractor considers anything provided, as described above, to be outside the current scope of work, the contractor shall withhold performance on the part(s) in question and immediately notify the Contracting Officer, in writing or by e-mail, and request formal directions regarding continued performance requirements.

## **ATTACHMENTS: 0**