

Hydroxyurea and Sickle Cell: Improving Care and Controlling Costs

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Problem:

- Reviewing the Q4 2016 IP Utilization report...

Top 10 Medical IP Admissions - by # of Admission

DIAG1	DIAGNOSIS_DESC	Rank by # of Stays	# of Stays	%	LOS	% of LOS	PAY	% of PAY
A419	Sepsis, unspecified organism	1	131	4.36%	811	3.22%	\$861,183	4.24%
D5700	Hb-SS disease with crisis, unspecified	2	98	3.20%	358	1.42%	\$499,660	2.46%
J189	Pneumonia, unspecified organism	3	90	2.99%	345	1.37%	\$418,628	2.06%

- In Q4 2016, **sickle cell crises** resulted in 98 in-patient hospitalizations **costing \$499,660**.
- Normalized for the entire year, this represents nearly \$2,000,000 in payouts.
- ACLA has 363 members with SCD, including 175 children (~48%).

Problem, continued:

Difficulties extend beyond in-patient stays.

According to a June 9 internal report on all ACLA members with SCD, we have:

- ER Services: One member with 315 ER visits, and another member with 292.
- Ambulance services: One member with 90 counts, and another with 89.
- Readmissions: One member with 9 cases of readmission within one month.

What's more: **None** of the members mentioned on this slide have assigned case managers.*

Potential Solutions

Hydroxyurea: A medicine recommended for use among a wide range of SCD patients. Records show Hydroxyurea claims by only about 1/3 of ACLA's members with SCD.

Encourage increased Hydroxyurea utilization through:

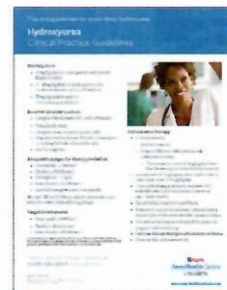
- **Associate Education**
- **Provider Outreach**
 - Physicians
 - Pharmacists
- **Member Outreach**

Associate Education

- Teach associates, especially member-facing associates, about Hydroxyurea.
- Encourage associates to suggest Hydroxyurea *to appropriate members* through established communication pathways (e.g. CHE, CHN, telephonic).

Provider Outreach

- Have provider-facing associates discuss Hydroxyurea as a treatment option.
 - Medical Directors/Pharmacy
 - Account Executives: Tool Box addition?
 - Fax blast?
- Give providers the SHSC-developed Hydroxyurea provider information sheet.
- Give providers the ACLA-developed Hydroxyurea member information brochure.
- Reach out to Louisiana chapter of the American Academy of Pediatrics.



Member Outreach

- Educational Materials
- Associate Outreach
- Electronic Outreach
- New Members
- Targeted Intervention
- Action Plan
- Additional Resources

Educational Materials

- Development of Hydroxyurea member information brochure.
 - Distribute to providers.
 - Distribute to outreach associates to provide to members.
 - Mail to members.
 - Provide electronic version as member web resource.
- Pending results of future survey* to determine member self-management, develop additional member educational materials.



Associate and Electronic Outreach

Hydroxyurea requires regular blood work, especially during the early stages of treatment.

Managing this aspect of care could be a potential barrier to member compliance.

Outreach by associates and via electronic media offers the means to overcome these barriers.

Associate Outreach

As above, member-facing associates should be:

- educated about Hydroxyurea.
- trained to recommend it *to appropriate members*.
- provided with printed educational materials.

Associates (e.g. CM/RROT) continue to take lead:

- scheduling appointments.
- scheduling follow-up visits.
- transportation arrangements.
- etc.

Electronic Outreach

Explore text messaging as tool to remove barriers to member compliance, e.g. as reminders to:

- maintain medication schedule
- attend appointments.
- arrange transportation or notify of pick up.

Provide electronic resources via website and, when applicable, via email.

Pending results of **asthma tablet program**, consider similar nontraditional intervention to encourage childhood compliance, and/or transition to adulthood self management.

New Members

Establish algorithm for new members with SCD or members recently identified to have SCD.

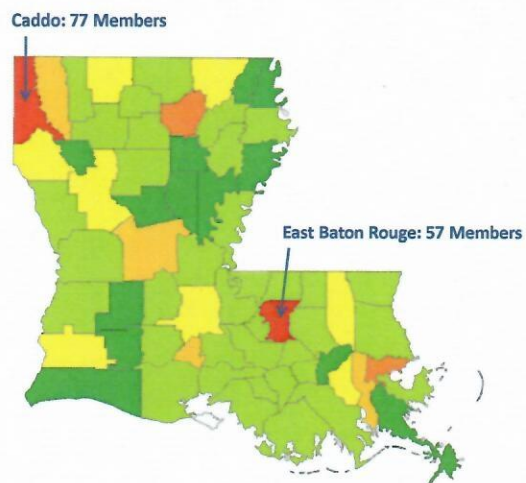
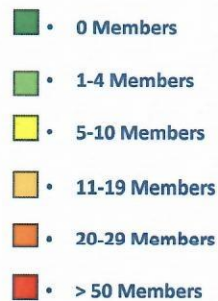
- Assign to PCP familiar with HU prescription.
- Provide information about Hydroxyurea.
- Review utilization history and assess for case management.
- Register for appropriate interventions (e.g. text reminders).

Targeted Interventions

Goals:

- Which geographic regions can benefit most from intervention?
- Which individual members can benefit most from intervention?

ACLA Members with SCD by Parish



* There are no parishes with 30-50 members with SCD.

Hydroxyurea Utilization Among ACLA Members with SCD by Parish

Parish	HU*	No HU	Total	% on HU
Caddo	24	53	77	31%
EBR	17	40	57	30%
Orleans	6	22	28	21%
Ouachita	7	15	22	32%
Rapides	5	14	19	26%
Jefferson	5	14	19	26%
Bossier	6	8	14	43%
Lafayette	2	8	10	20%

* Indicates whether member has *any* claims for Hydroxyurea since January 2014.

PCPs with the Most Members Not Utilizing Hydroxyurea

Provider	Parish	No. of Members w/o HU
ADELEYE, OLUSEGUN A.	Natchitoches	7
IBRAHIM, ABUBAKAR D.	Caddo	6
★ HORTON, CHERRY I.	Caddo	6
LOUD, SUYAH M.	Caddo	4
★ HENSON, STEPHANIE B.	Caddo	4
MITCHELL, MARCIA E.	Rapides	4
★ ROUSSEAU, JEAN W.	Caddo	4
HOWES, RICHARD F.	Lafayette	4
KARANI-OBRYAN, LOREEN C.	Vermilion	3
MALIK, SHAHZAD M.	Morehouse	3
ABDEL-SAYED, MYRIAM A.	Lafayette	3

Services Utilization and Hydroxyurea Usage: In-patient Services

	INPT SVCS		
	0	1+	5+
Caddo Members with SCD on Hydroxyurea	6	18	12
Caddo Members with SCD not on Hydroxyurea	21	32	3

Services Utilization and Hydroxyurea Usage: In-patient Services in Two Parishes

	INPT SVCS		
	0	1+	5+
Caddo Members w/ SCD on HU	6	18	12
Caddo Members w/ SCD not on HU	21	32	3
EBR Members w/ SCD on HU	10	7	5
EBR Members w/ SCD not on HU	26	14	1

This slide serves to compare Caddo to EBR, another parish with high SCD rates. The numbers between the two parishes are similar.

Services Utilization and Hydroxyurea Usage: ER Services

	ER SVCS		
	0	1+	5+
Caddo Members with SCD on Hydroxyurea	4	20	8
Caddo Members with SCD not on Hydroxyurea	16	37	6

Services Utilization and Hydroxyurea Usage: ER Services in Two Parishes

	ER SVCS		
	0	1+	5+
Caddo Members w/ SCD on HU	4	20	8
Caddo Members w/ SCD not on HU	16	37	6
EBR Members w/ SCD on HU	4	13	5
EBR Members w/ SCD not on HU	14	26	5

This slide serves to compare Caddo to EBR, another parish with high SCD rates. The numbers between the two parishes are similar.

Services Utilization and Hydroxyurea Usage: Ambulance Services

	AMB SVCS		
	0	1+	5+
Caddo Members with SCD on Hydroxyurea	0	24	23
Caddo Members with SCD not on Hydroxyurea	2	51	46

Services Utilization and Hydroxyurea Usage: Ambulance Services in Two Parishes

	AMB SVCS		
	0	1+	5+
Caddo Members w/ SCD on HU	0	24	23
Caddo Members w/ SCD not on HU	2	51	46
EBR Members w/ SCD on HU	0	17	13
EBR Members w/ SCD not on HU	2	38	35

This slide serves to compare Caddo to EBR, another parish with high SCD rates. The numbers between the two parishes are similar.

Services Utilization and Hydroxyurea Usage: 30-Day Readmission

	30DAY READMIT	
	0-1	2+
Caddo Members w/ SCD on HU	21	3
Caddo Members w/ SCD not on HU	51	2

Services Utilization and Hydroxyurea Usage: 30-Day Readmissions in Two Parishes

	30DAY READMIT	
	0-1	2+
Caddo Members w/ SCD on HU	21	3
Caddo Members w/ SCD not on HU	51	2
EBR Members w/ SCD on HU	40	0
EBR Members w/ SCD not on HU	17	0

This slide serves to compare Caddo to EBR, another parish with high SCD rates. The numbers between the two parishes are similar.

Services Utilization and Hydroxyurea Usage

	ER SVCS			INPT SVCS			AMB SVCS			30DAY READMIT	
	0	1+	5+	0	1+	5+	0	1+	5+	0-1	2+
Caddo w/ HU	4	20	8	6	18	12	0	24	23	21	3
Caddo w/o HU	16	37	6	21	32	3	2	51	46	51	2
EBR w/ HU	4	13	5	10	7	5	0	17	13	40	0
EBR w/o HU	14	26	5	26	14	1	2	38	35	17	0

Individual Members

Compiled a list of arbitrarily defined high utilizers:

- 50+ ER services.
- 50+ ambulance services.
- 10+ in-patient services.
- 2+ 30-day readmissions.
- Or any combination of the above.

Yielded a list of **24 ACLA members**.

High Utilizers

MEMBER_ID	Parish	ERSVCS	INPTSVCS	AMBSVCS	READMIT_30DAY	Case Manager
90659915	Acadia	2	10	5	5	KJM
90651684	Assumption	52	7	28	4	_Unassigned_
90723989	Avoyelles	3	4	89	1	_Unassigned_
90707768	Bossier	11	16	33	9	SL
90699781	Bossier	7	5	30	2	SL
90678645	Bossier	4	13	24	9	_Unassigned_
90702877	Caddo	40	7	33	3	KJM
90692407	Caddo	17	10	33	6	_Unassigned_
90703211	Caddo	13	7	35	5	_Unassigned_
90959627	Caddo	1	5	53	3	KJM
90701904	Caddo	1	5	18	2	_Unassigned_
90675775	Calcasieu	4	11	90	2	_Unassigned_
90767763	Claiborne	315	3	21	0	_Unassigned_
90954440	Claiborne	292	0	27	0	_Unassigned_
90785566	Claiborne	87	3	13	0	_Unassigned_
90631083	East Baton Rouge	23	0	51	0	SS
90561615	Jefferson	6	10	3	0	SH
90653906	Jefferson	0	10	56	0	_Unassigned_
91278829	Livingston	24	11	6	2	_Unassigned_
91235222	Orleans	10	3	6	2	_Unassigned_
90721258	Rapides	5	6	47	3	_Unassigned_
90820011	St James	28	8	31	2	_Unassigned_
90637493	St James	2	12	54	4	_Unassigned_
90770255	UNION	4	3	51	1	_Unassigned_

High Utilizers: Multiple Services

MEMBER_ID	Parish	ERSVCS	INPTSVCS	AMBSVCS	READMIT_30DAY	Case Manager
90659915	Acadia	2	10	5	5	KJM
90651684	Assumption	52	7	28	4	_Unassigned_
90723989	Avoyelles	3	4	89	1	_Unassigned_
90707768	Bossier	11	16	33	9	SL
90699781	Bossier	7	5	30	2	SL
90678645	Bossier	4	13	24	9	_Unassigned_
90702877	Caddo	40	7	33	3	KJM
90692407	Caddo	17	10	33	6	_Unassigned_
90703211	Caddo	13	7	35	5	_Unassigned_
90959627	Caddo	1	5	53	3	KJM
90701904	Caddo	1	5	18	2	_Unassigned_
90675775	Calcasieu	4	11	90	2	_Unassigned_
90767763	Claiborne	315	3	21	0	_Unassigned_
90954440	Claiborne	292	0	27	0	_Unassigned_
90785566	Claiborne	87	3	13	0	_Unassigned_
90631083	East Baton Rouge	23	0	51	0	SS
90561615	Jefferson	6	10	3	0	SH
90653906	Jefferson	0	10	56	0	_Unassigned_
91278829	Livingston	24	11	6	2	_Unassigned_
91235222	Orleans	10	3	6	2	_Unassigned_
90721258	Rapides	5	6	47	3	_Unassigned_
90820011	St James	28	8	31	2	_Unassigned_
90637493	St James	2	12	54	4	_Unassigned_
90770255	UNION	4	3	51	1	_Unassigned_

High Utilizers: Case Management

MEMBER_ID	Parish	ERSVCS	INPTSVCS	AMBSVCS	READMIT_30DAY	Case Manager
90659915	Acadia	2	10	5	5	KJM
90651684	Assumption	52	7	28	4	_Unassigned_
90723989	Avoyelles	3	4	89	1	_Unassigned_
90707768	Bossier	11	16	33	9	SL
90699781	Bossier	7	5	30	2	SL
90678645	Bossier	4	13	24	9	_Unassigned_
90702877	Caddo	40	7	33	3	KJM
90692407	Caddo	17	10	33	6	_Unassigned_
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90959627	Caddo	1	5	53	3	KJM
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90785566	Claiborne	87	3	13	0	_Unassigned_
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90561615	Jefferson	6	10	3	0	SH
90653906	Jefferson	0	10	56	0	_Unassigned_
91278829	Livingston	24	11	6	2	_Unassigned_
91235222	Orleans	10	3	6	2	_Unassigned_
90721258	Rapides	5	6	47	3	_Unassigned_
90820011	St James	28	8	31	2	_Unassigned_
90637493	St James	2	12	54	4	_Unassigned_
90770255	UNION	4	3	51	1	_Unassigned_

High Utilizers: Location

MEMBER_ID	Parish	ERSVCS	INPTSVCS	AMBSVCS	READMIT_30DAY	Case Manager
90659915	Acadia	2	10	5	5	KJM
90651684	Assumption	52	7	28	4	_Unassigned_
90723989	Avoyelles	3	4	89	1	_Unassigned_
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90701904	Caddo	1	5	18	2	_Unassigned_
90675775	Calcasieu	4	11	90	2	_Unassigned_
90767763	Claiborne	315	3	21	0	_Unassigned_
90954440	Claiborne	292	0	27	0	_Unassigned_
90785566	Claiborne	87	3	13	0	_Unassigned_
90631083	East Baton Rouge	23	0	51	0	SS
90561615	Jefferson	6	10	3	0	SH
90653906	Jefferson	0	10	56	0	_Unassigned_
91278829	Livingston	24	11	6	2	_Unassigned_
91235222	Orleans	10	3	6	2	_Unassigned_
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90637493	St James	2	12	54	4	_Unassigned_
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Action Plan

- **Target Caddo-Bossier area** SCD members and their providers to increase Hydroxyurea use.
- Use new **Community Wellness Center as a launch-pad** for member education efforts.
- Coordinate between ACLA HQ in Baton Rouge and Region 7 associates to **ensure educational materials and interventions reach highest-need members.**
- **Use additional resources** (see next slide) to disseminate information throughout community.

Additional Resources

- David Raines Community Health Centers
- Shreveport-Bossier churches
- National Resources: CDC, NHLBI, SCDA
- State Resources: Louisiana Department of Health
- SCDA Northwest Louisiana
- LSU Health Shreveport
 - Sickle Cell Service, LSUHSC-S Feist-Weiller Cancer Center
 - Sickle Cell Center of Northern Louisiana
- Contact our Region 7 outreach associates for further ideas.

Acknowledgements

- **Suconda Smith**
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Questions?

Thank you for your time and attention!

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