

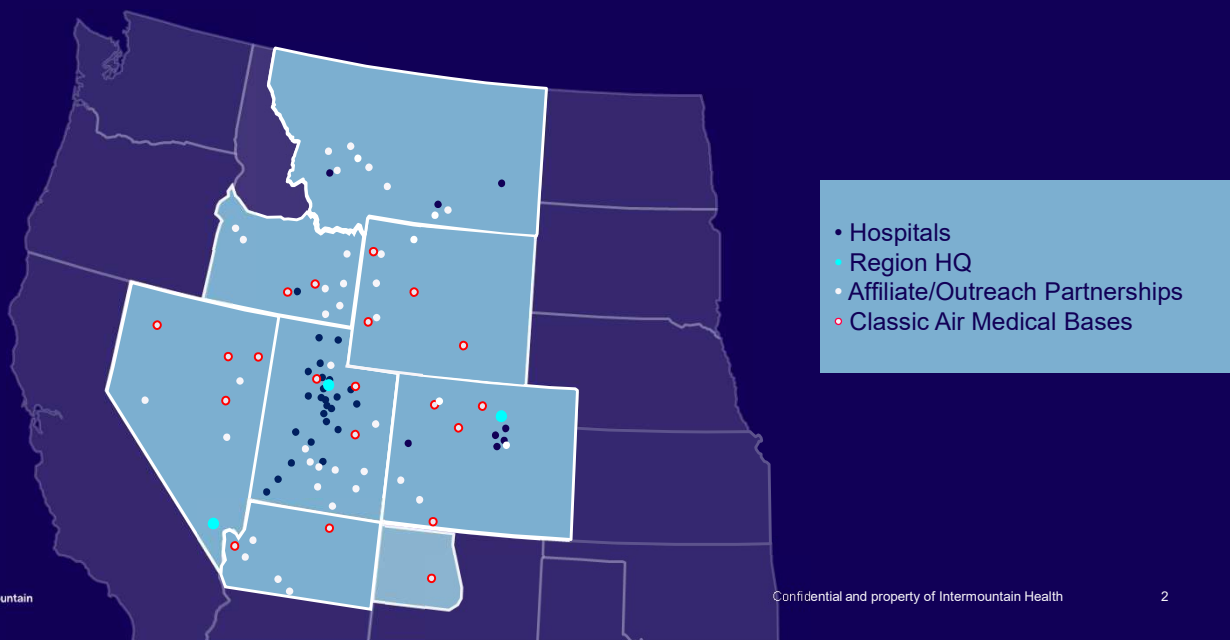


RSV Prevention Coordination in an Integrated Health System

Whitney Buckel, PharmD, BCIDP
System Antimicrobial Stewardship Program Manager
Intermountain Health

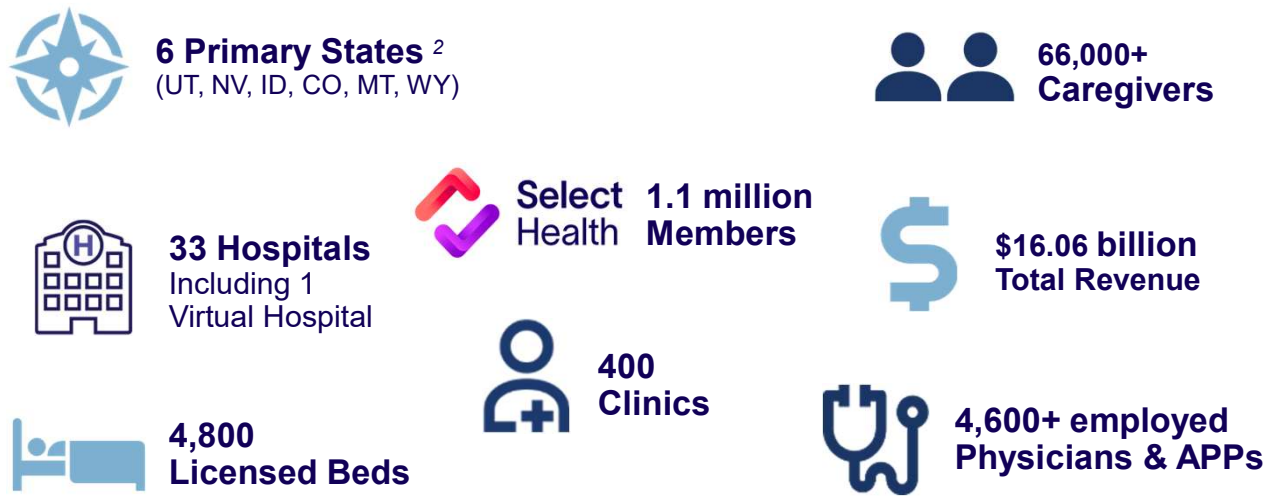
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Intermountain Health's Current Footprint



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Intermountain by the Numbers¹



¹ Numbers reflect through year end, December 31, 2023
² Intermountain also provides air medical transport services in other states through Classic Air Medical

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Our Mission

Helping People Live the Healthiest Lives Possible[®]

Our Values



Our Vision

Be a model health system by providing extraordinary care and superior service at an affordable cost

Our Brand Promise

Health for you, with you

Our Caregiver Promise

Together, for the healthiest lives

Mission for our Catholic entities:

"We reveal and foster God's healing love by improving the health of the people and communities we serve, especially those who are poor and vulnerable."

Bridge statement for Catholic mission and values:

Our Catholic health Ministry and Mission are entrusted to us to honor the sacred dignity of human life and the inherent worth of every person and are aligned with our common values.

Nirsevimab Implementation Team



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Medical Director,
Immunization Programs



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Manager



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Tim Duffy, MD
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Ambulatory Clinical
Program - Pediatrics



Isabel Pande, PharmD
Pharmacy Operations Director



Liz O'Brien, MD
Neonatologist



Kevin Chen, MD
Stanford/Intermountain
Fellow

Timeline Over Two RSV Seasons

2023-2024 Season

Oct

Feb

Mar

Education on new immunizations
Development of tools
Contract negotiations
Shortage management

2024-2025 Season

Oct

Apr

Vaccines for Children (VFC) in hospitals
Parent campaign & physician incentives
Dashboards and data
Season extension



Initial Plan in October 2023

Hospitals

- Infants who previously qualified for palivizumab (Synagis), or
- Any newborn infants discharged or transferred from a level 2, 3 or 4 neonatal intensive care unit (NICU) or other intensive care unit (e.g., PICU, CCU)

Clinics

- Wait for VFC supply to implement, monitor RSV rates
- Planned for all eligible patients
 - <8 months old and first RSV season
 - Newborns who did not receive nirsevimab in the inpatient setting
 - High risk children aged 8 – 19 months entering their second RSV season



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Implementation Tool: Operational Checklist

Multidisciplinary Calls with Numerous Stakeholders

- | | | |
|--|--|---|
| • Availability from distributor (<i>Purchasing</i>) | • Referral to Health Departments (<i>State Health Departments</i>) | • Finance (<i>Contracting, Billing, Reimbursement, Budgeting</i>) |
| • Ordering Nirsevimab, Abrysvo (<i>EHR analysts</i>) | • RSV rate monitoring (<i>Pediatric ID</i>) | • VFC (<i>Clinic Managers, Pharmacy Directors</i>) |
| • Palivizumab recommendations (<i>Specialty</i>) | • Abrysvo Guidance/Ed (<i>OBGYN</i>) | • State Immunization Reporting (<i>analyst</i>) |
| • Formulary restrictions (<i>P&T Committee</i>) | • Nirsevimab Guidance/Ed (<i>Neonatology, Pediatrics</i>) | • Policy/Procedure (<i>Operations Managers</i>) |



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Implementation Tools

Intermountain Respiratory Syncytial Virus (RSV) Vaccine (ABRYVSO™, AREXVY™) Standing Order

Standing Order Purpose Statement

To provide information on the correct storage, administration and documentation of Respiratory Syncytial Virus Vaccine (ABRYVSO™) and Respirator

Scope

IHC Health Services, Inc., Inter Pharmacies

Definitions

Licensed Independent Practitioner (LP) - An individual permitted by law and privileged by the organization to provide care, treatment, and services to patients and community members served by Intermountain Health.

Immunization 223

Standing Order

- 1. RSV vaccine MAY be administered by a technician AFTER shared
- 2. ABRYVSO™ RSV vaccine nurse, medical assistant, or pregnant persons from also RSV monovalent at
- An LP should review will vaccine or their infant?

• If you have any ques

Manufacturer:	ABRYVSO™
Vaccine:	ABRYVSO™
	• Sinx • R • R • P

- 3. Dose:
- Store refrigerated bote
- Store in original pack

Intermountain Respiratory Syncytial Virus (RSV) Monoclonal Antibody, Nirsevimab-alip (BEYFORTUS™) Standing Order

Standing Order Purpose Statement

To provide information on the correct storage, administration and documentation of Respiratory Syncytial Virus (RSV) Protein directed fusion inhibitor monoclonal antibody nirsevimab-alip (BEYFORTUS™) given to patients and community members served by Intermountain Health.

Scope

IHC Health Services, Inc., Intermountain Health Hospitals, Intermountain Medical Group

Definitions

Licensed Practitioner (LP) - An individual permitted by law and privileged by the organization to provide care, treatment, and services to patients. A licensed independent practitioner operates within the scope of their license and corresponding state law and operates consistently with individually granted clinical privileges.

Diagnosis and Diagnosis Code

Immunization 223

Standing Order

- 1. RSV monoclonal antibody nirsevimab-alip (BEYFORTUS™) is administered by an LP, registered nurse, medical assistant to:
- Neonates and infants born during RSV season (from October through March)
- Infants younger than 8 months born from April through September entering their first RSV season
- High-risk infants (as determined by an LP, using criteria below) ages 8 months through 19 months entering their second RSV season

• If you have any questions or concerns, consult with the LP before administering product

Manufacturer:	AstraZeneca
Product:	BEYFORTUS™
	• Single-dose pre-filled syringe, 50 mg/0.5 mL - no preservative
	• Single-dose pre-filled syringe, 100 mg/1 mL - no preservative

2. Dose:

- Store refrigerated between 2°C and 8°C (36°F and 46°F). May be kept at room temperature between 20°C and 25°C (68°F and 77°F) for a maximum to 8 hours. After removal from the refrigerator, it must be used within 8 hours or discarded. Do not freeze.
- Store in original package to protect from light.
- Do not shake.
- Administer 0.5 mL or 1 mL intramuscularly (IM) in the anterolateral aspect of the thigh. If two 1 mL injections



Patient name: _____
Patient DOB: _____
Patient weight: _____

Nirsevimab (BEYFORTUS) Monoclonal Antibody Patient Checklist

1	Has the patient been diagnosed with RSV this season (Oct. 2024-March 2025)?	Yes	No
	Yes - Do NOT give Nirsevimab		
	No - Go to question 2		
2	Is this the infant's first RSV season (born after March 31, 2024)?	Yes	No
	Yes - Go to question 3		
	No - Go to question 8		
3	Is the patient younger than 8 months?	Yes	No
	Yes - Go to question 4		
	No - Go to question 8		
4	Has the patient received a prior dose of Nirsevimab (BEYFORTUS), such as in the hospital at birth?	Yes	No
	Yes - Do NOT give Nirsevimab		
	No - Go to question 5		
5	Did the mother receive Abrysvo between 32-36 weeks gestation?	Yes	No
	Yes - Go to question 6		
	No - Go to question 7		
6	Was Abrysvo given to the mother at least 14 days before giving birth?	Yes	No
	Yes - Do NOT give Nirsevimab		
	No - Go to question 7		
7	Does the patient weigh less than 5kg today?	Yes	No
	Yes - Administer (1) 50 mg dose		
	No - Administer (1) 100mg dose		
8	Physician/APP: Is the infant a high-risk infant* younger than 19 months in their 2nd RSV season?	Yes	No
	Yes - Administer (2) 100 mg doses		
	No - Do NOT give Nirsevimab		

*Scan this document into patient chart under "Medications and Injections"

*Definition of high-risk infant:

- Children with chronic lung disease of prematurity if they require medical support such as any of the following during the 6-month period prior to the start of their 2nd RSV season: Chronic corticosteroid therapy, diuretic therapy, or supplemental oxygen
- Children severely immunocompromised
- Children with cystic fibrosis if manifestation of severe lung disease include any of the following: previous hospitalization for pulmonary exacerbation in the 1st year of life, abnormalities on chest imaging that persist when stable, or weight-for-length <10th percentile
- American Indian or Alaska Native

*FAQ: Baby was born in March 2024 so baby is <8 months in October 2024. Should they receive Nirsevimab? Technically babies born in February and March 2024 have been through their 1st RSV season and would not qualify for Nirsevimab. Babies born after 3/31/2024 would be entering their 1st RSV season and qualify for Nirsevimab.

Last update: 06/17/2024

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Implementation Tools

RSV Prophylaxis (under 8 months)

Note: (Not an order) Give only Oct-Mar (RSV Season)

Note: (Not an order) Check mother's RSV vaccine status & patient weight, then choose an order below

1- nirsevimab 50 mg (BEYFORTUS) [< 5 kg, < 8 mo]

nirsevimab-alip 50 mg/0.5 mL PF intramuscular solution 50 mg, IntraMuscular, Once, Injectable, First Dose Priority: NOW

2- nirsevimab 100 mg (BEYFORTUS) [5 kg+, < 8 mo]

nirsevimab-alip 100 mg/mL PF intramuscular solution 100 mg, IntraMuscular, Once, Injectable, First Dose Priority: NOW

Hepatitis B Vaccinations

- ▶ For infants of mothers with POSITIVE hepatitis B status (give within 12 hours in two different legs) (GS LM PVB SJ SJB SMG SPH SVB) Click for more
- ▶ For infants of mothers with UNKNOWN hepatitis B status (give in two different legs) (GS LM PVB SJ SJB SMG SPH SVB) Click for more
- ▶ For infants of mothers with NEGATIVE hepatitis status (GS LM PVB SJ SJB SMG SPH SVB) Click for more

RSV Protection with Nirsevimab (ONLY applicable October 1st to March 31st during RSV season)

For infants of mother with UNKNOWN RSV vaccination status

Notify pediatrician that mom's RSV vaccination status needs to be clarified prior to ordering. If indicated, provider will need to place orders.

For infants of mothers who did NOT receive the RSV vaccine between 32 and 36 weeks gestation AND at least 14 days prior to delivery

nirsevimab immunization

0.5 mL, ONE TIME AS NEEDED; Give prior to discharge, * Give prior to discharge, contact pharmacy prior to discharge to have immunization sent to floor * Administer intramuscularly in the thigh. Do NOT inject into the gluteal muscle. * Give additional vaccines in separate syringes and at different injection sites. * Do NOT shake * Discontinue if refused or not indicated

RSV Prophylaxis Eligibility	<input checked="" type="checkbox"/>
Maternal RSV Vaccine Given	No
High Risk Infant	Yes
RSV Prophylaxis Given	RSV Prophylaxis Given
	Yes
	No, not RSV Season (Dec-May)
	Contraindicated
	Parents declined
	No, maternal vaccine is adequate



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Vaccines for Children (VFC)

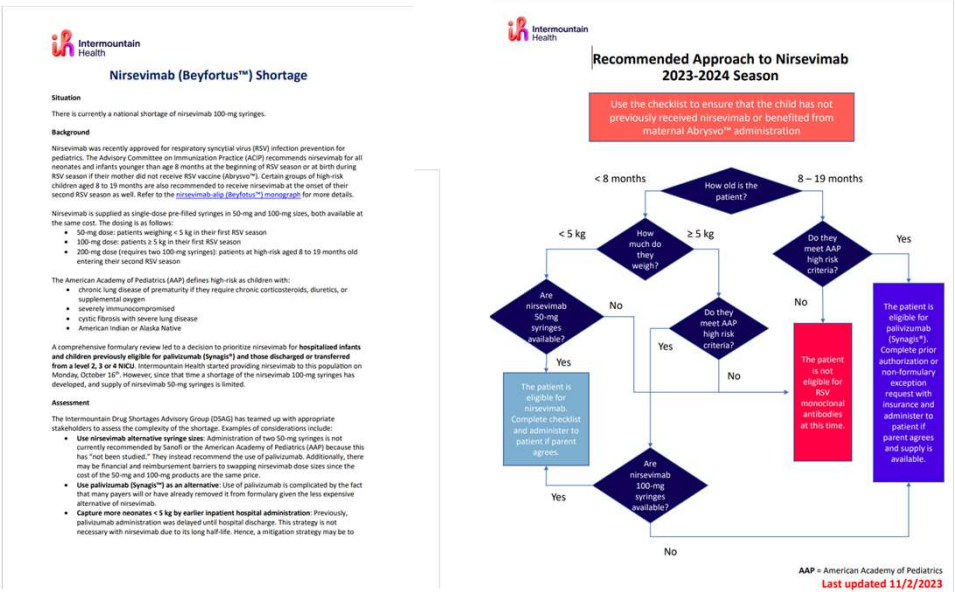
Task: Enroll hospitals in VFC

- Hospitals were in general NOT enrolled in VFC
 - Kick off call regarding enrollment: September 2023
 - Update calls: October 2023
 - Barriers encountered: shortage PLUS insurance identification
 - All sites able to give VFC: January 2024
 - New Utah VFC Nirsevimab Go Live: October 2024



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Nirsevimab Shortage (Oct 2023 – Jan 2024)



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Expansion to Inpatient Well Newborns (Feb 2024)

Why?

- Safety and efficacy
- Equitable access
- Payer contract negotiations (Inpatient DRGs)
- Other organizations are doing it (Kaiser, Health Partners, Columbia)
- The child first and always



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Outpatient Implementation

- Relied heavily on our regional clinic leaders
- Leverage nurse driven processes and operational checklists
- Engaged clinicians prepared their patients for nirsevimab at next visits
 - Created challenges during shortage (high call volumes, wait lists, news media requests, coordination with state on parent communication)
- Challenges with confirming mother's receipt of Abrysvo, largely assisted by real-time bidirectional interface between state registry and electronic health record



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Second Season Approach

Process Improvements

- Consistency and alignment enterprise-wide
- Communication to pediatricians —————→
 - Especially affiliated providers
- Digital marketing campaign
- Value-based care incentive program
- Extending the season
- Data tracking and reporting

RSV Protection Administration
Card for Newborns
(To be filled out by nurse or LIP)



Name: _____

Date of Birth: _____

☐ I received nirsevimab (Beyfortus) on MM/DD: _____

OR

☐ My mom received the RSV vaccine (Abrysvo) at least 2 weeks before I was born

Take a picture of this card with your phone in case it is lost!





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Digital Messaging Campaign

Option 1



Dear [REDACTED]

We hope this message finds you well. At Intermountain Health, we want to help keep your child healthy and out of the hospital. RSV (Respiratory Syncytial Virus) comes each winter and causes many very young children to get very sick.

We are writing to let you know that [REDACTED] is eligible for Beyfortus. Beyfortus is an injection that can prevent severe RSV infection. It is best for your child to get Beyfortus starting in October to prevent RSV infections during the winter.

Please call Redrock Pediatrics at [REDACTED] for scheduling options.

Option 2

Dear [REDACTED]

We hope this message finds you well. At Intermountain Health, we want to help keep your child healthy and out of the hospital. RSV (Respiratory Syncytial Virus) comes each winter and causes many very young children to get very sick.

We are writing to let you know that [REDACTED] is eligible for Beyfortus. Beyfortus is an injection that can prevent severe RSV infection. It is best for your child to get Beyfortus starting in October to prevent RSV infections during the winter.

[REDACTED] has an appointment on Oct 14 2024 with [REDACTED]. During that appointment, please ask about Beyfortus.

[Learn more about Nirsevimab \(Beyfortus®\) for RSV Prevention](#)



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Value-Based Care Incentive Program

Proactive Care Payment Model (2024-2025 Season)

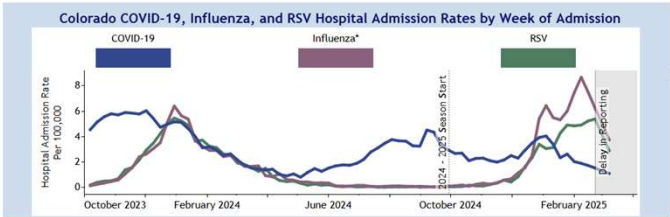
- Partnership between Intermountain Proactive Care Support Services, Pediatric Population Health Team, Children’s Health, Community Partners and Insurance Companies (Select Health and Aetna)
- Aim: To assist pediatric and family medicine clinics with the financial burden of providing nirsevimab to their patients and incentivize adoption
- Estimated a net savings per child of \$185
- Implemented a financial incentive of \$80 per dose



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Stop Date Extension

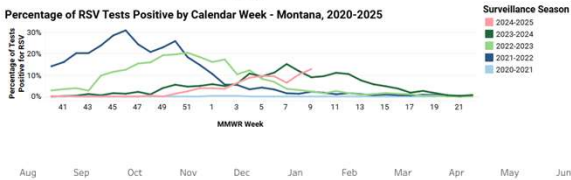
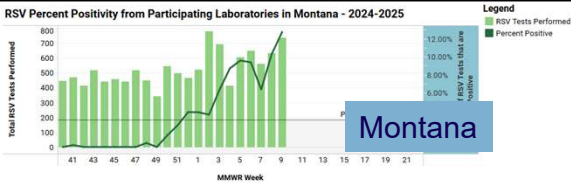
Situation: Your neonatologist comes to you worried that community rates of RSV are still high, should they really stop providing nirsevimab on March 31st?



Colorado

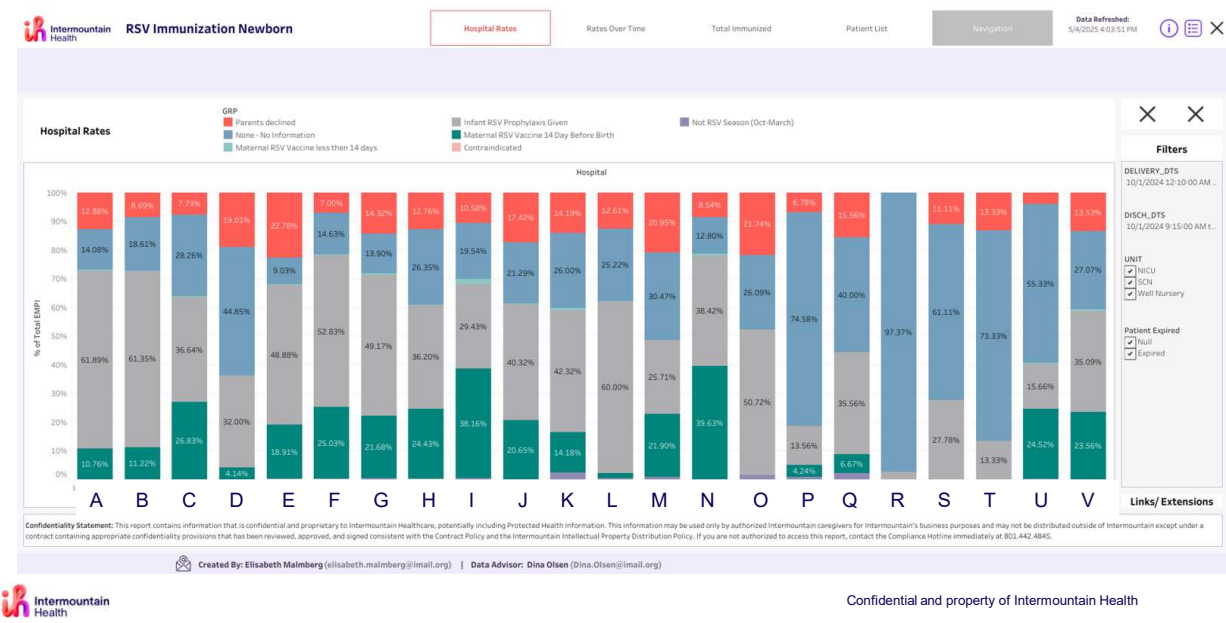


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Utah

System-level Metrics and Monitoring



System-level Metrics and Monitoring

Value-Based Care Dashboard for Medical Group Clinics

Infant Birth Month	% Maternal Abrysvo	% Eligible Infant Beyfortus*	% Either Abrysvo or Befortus
Apr '24 – Sep '24	0.3%	54%	56%
Oct '24 – Mar '25	15%	49%	57%

*In eligible patients whose mothers did not receive Abrysvo.

Conclusions

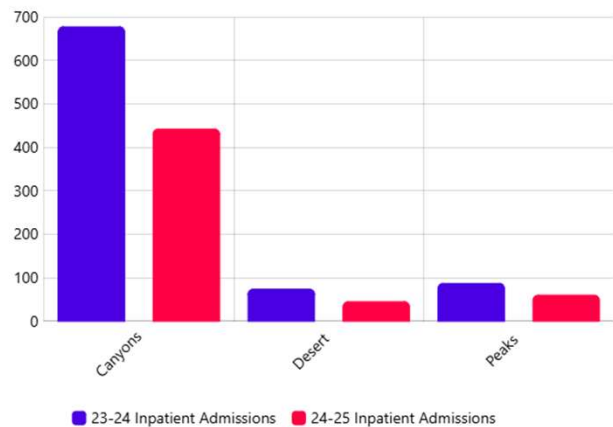
It truly takes a village to protect our most vulnerable!

- Leadership approval prior to assurance of reimbursement was key to moving forward expeditiously and supported “it is the right thing to do”
- **Integrated clinical teams** and **system leaders** facilitate fast decision making
- Huddle systems facilitate rapid communication and reminders to clinicians
- **Longstanding trusted relationships** between public and private systems and between manufacturers, providers and payers
- Operations support is critical from electronic health records and state registries

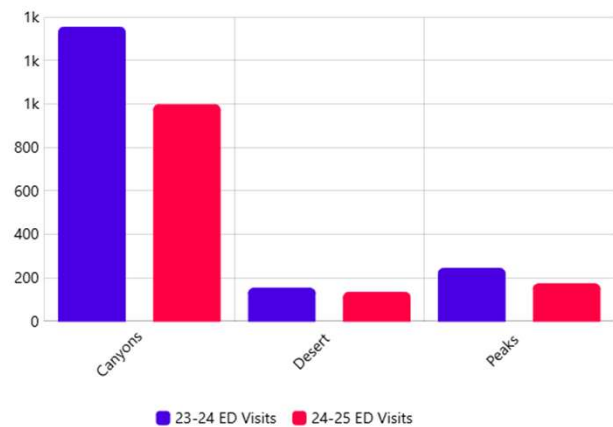
Thank you.

System-level Metrics and Monitoring

RSV Inpatient Admissions by Region

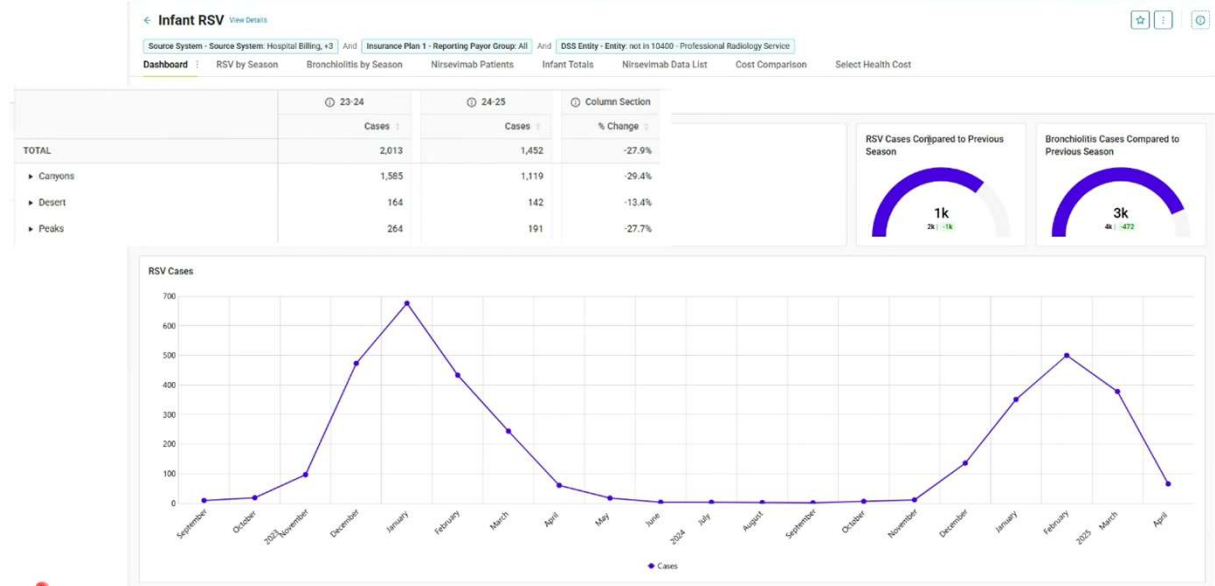


RSV ED Visits by Region



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Looking Back at the Impact

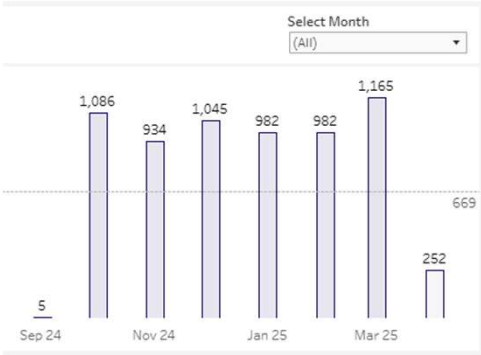


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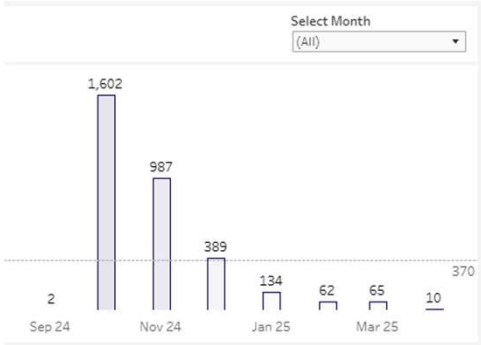
Looking Back at the Impact

2024-2025 Season in our Utah and Idaho Regions

Inpatient Utilization



Outpatient Utilization



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System-level Metrics and Monitoring

	① Nirsevimab	① RSV		
	Nirsevimab Patients ⚙	Nirsevimab Patients with RSV ⚙	ED Nirsevimab Patients with RSV ⚙	% of Nirsevimab Patients ⚙
TOTAL	6,920	32	58	1.3%
▶ Canyons	5,037	30	48	1.5%
▶ Desert	612	1	7	1.3%
▶ Peaks	1,306	1	4	0.4%

And in those admitted, a lower length of stay and direct variable costs in the 2024-2025 season compared to the 2023-2024 season.



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We have 33 Intermountain hospitals



Canyons Region

- Alta View Hospital
- American Fork Hospital
- Bear River Valley Hospital
- Cassia Regional Hospital
- Delta Community Hospital
- Filmore Community Hospital
- Heber Valley Hospital
- Intermountain Medical Center
- Layton Hospital
- LDS Hospital
- Logan Regional Hospital
- McKay-Dee Hospital
- Orem Community Hospital
- Park City Hospital

- Primary Children's Hospital, Salt Lake Campus
- Primary Children's Hospital, Larry H. and Gail Miller Family Campus in Lehi
- Riverton Hospital
- Sanpete Valley Hospital
- Sevier Valley Hospital
- Spanish Fork Hospital
- Utah Valley Hospital
- Virtual Hospital



Desert Region

- Cedar City Hospital
- Garfield Memorial Hospital
- St. George Regional Hospital



Peaks Region

- Good Samaritan Hospital
- Holy Rosary Hospital
- Lutheran Hospital
- Platte Valley Hospital
- Saint Joseph Hospital
- St. James Hospital
- St. Mary's Regional Hospital
- St. Vincent Regional Hospital



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We are Leaders in Clinical Excellence

6 Magnet Hospitals



10 5-Star Hospitals



9 World's Best Hospitals



#1 Top Large Health Systems

10 Top 100 Hospitals



#1 Kidney Transplant Matching Program

15 'A's
15 Of 20 eligible hospitals received "A" safety grade from Leapfrog for Fall 2024

vizient
84th overall percentile ranking

18 Hospitals receiving top equity honors



One Intermountain

We provide a consistent, extraordinary experience no matter where, when or how someone interacts with us. No matter where we are located, we act as one coordinated team.



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