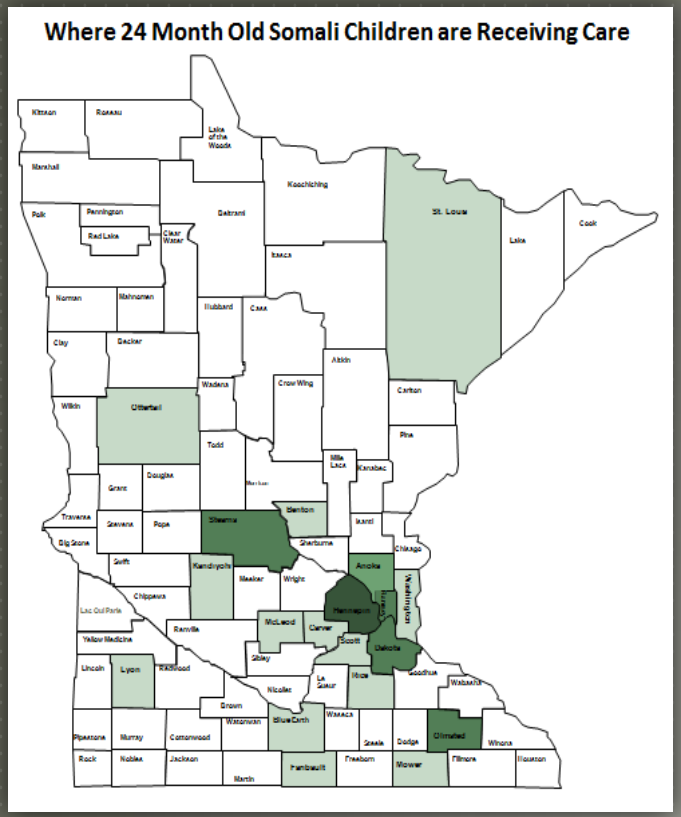

ADDRESSING VACCINE HESITANCY IN A DIVERSE COMMUNITY

MMR Vaccine Hesitancy in Minnesota Somalis

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Minnesota Department of Health

HESITANCY ISSUE EMERGES

- Summer 2008: Hesitancy issues raised via a TV news story
  - Featured community's concern about high numbers of Somali children with autism in Minneapolis special education programs
  - "It's the vaccines." claimed a Somali parent.
- "Autism" was a new phenomenon to Somali parents
  - Reported as not seen in Somalia
  - Resources difficult to obtain, overwhelming
  - Parents linked themselves to national groups that embrace the MMR- autism claim

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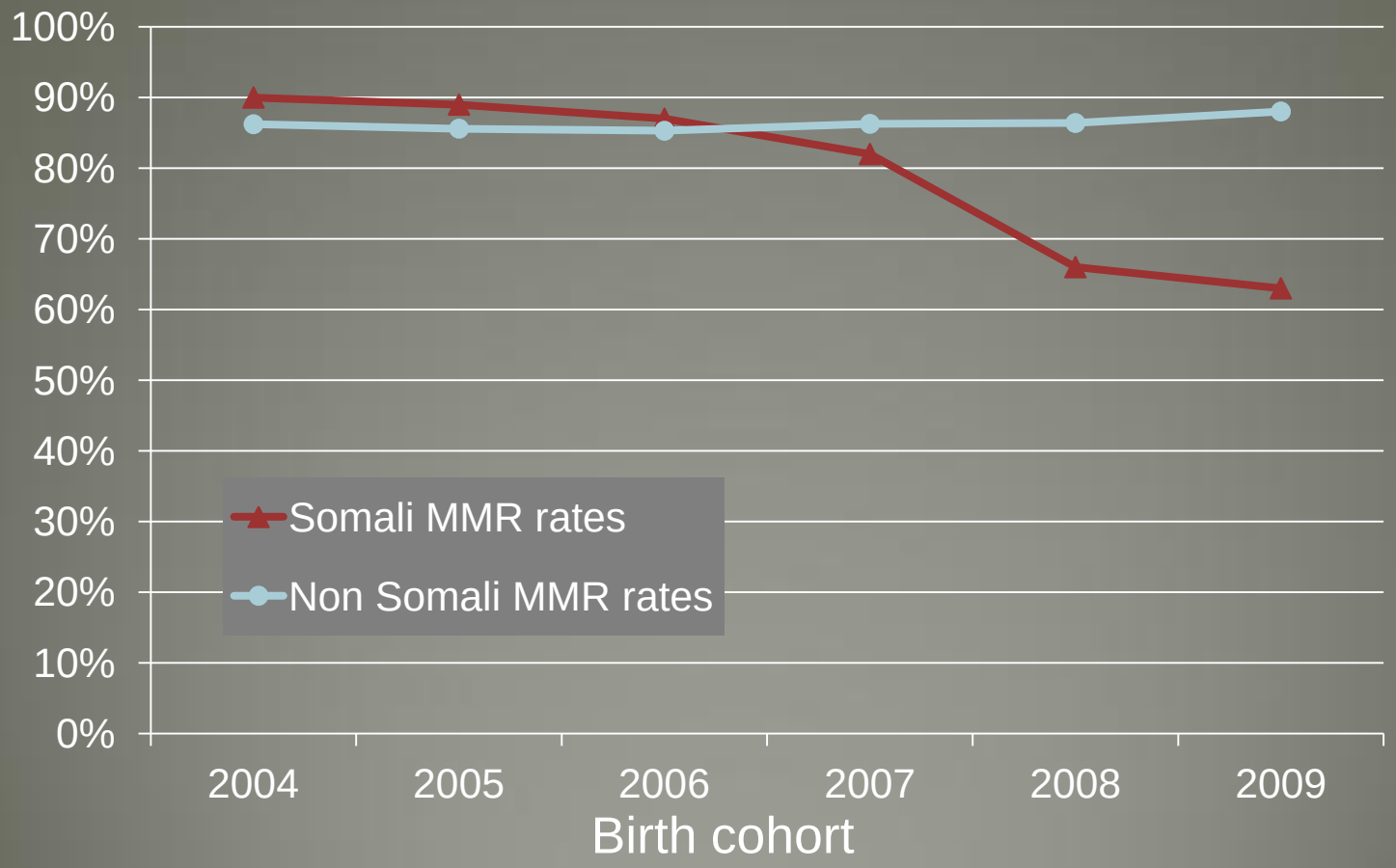
MISINFORMATION GROWS

- Spring 2009: MDH released analysis of enrollment data from Minneapolis Early Childhood Special Education
  - Showed higher numbers of Somali children enrolled compared to non-Somali children
  - Many caveats, not a prevalence study
- The 2009 MDH study fueled fear of autism
- Providers reported to MDH that Somali parents were refusing MMR
- 2011 measles outbreak prompted MDH to look at MMR rates

COMPARISON OF MMR RATES AT 24 MONTHS IN CHILDREN OF SOMALI DESCENT VERSUS NON SOMALI, 2004-2009, MINNESOTA



Data from Minnesota Immunization Information Connection, March 2011

OUTBREAK RESPONSE

- Leaders:
  - Must educate the community
  - Address autism before addressi
    immunizations
- Met with community:
  - Attendees: parents of children with autism and ad hoc members of the Vaccine Safety Council of Minnesota

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OUTBREAK RESPONSE CONT.

- Parents who have children diagnosed with autism:
  - Cannot say “vaccines don’t cause autism” and then say “we don’t know what causes autism”
  - “I would rather my child die of measles which is destiny than get autism which is punishment.”
  - MDH has told us that Somali children have more autism, what are they doing about this? Maybe MDH doesn’t care.

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ADDRESSING MMR VACCINE HESITANCY: 2011-2012

- Formed a loose Coalition:
  - HCP, public health, parents, Somali health professionals
  - Suggestion of peer-to-peer educational outreach originated from parents in this group
  - Interest/participation of Somali members waned quickly

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BEYOND OUTBREAK RESPONSE

- Diverse media outreach – focused on measles disease and importance of vaccination
  - Promoted Mayo's YouTube video
  - Developed a travel PSA
  - Posted a video of an interview with mother of child who almost died from measles
  - Radio announcements

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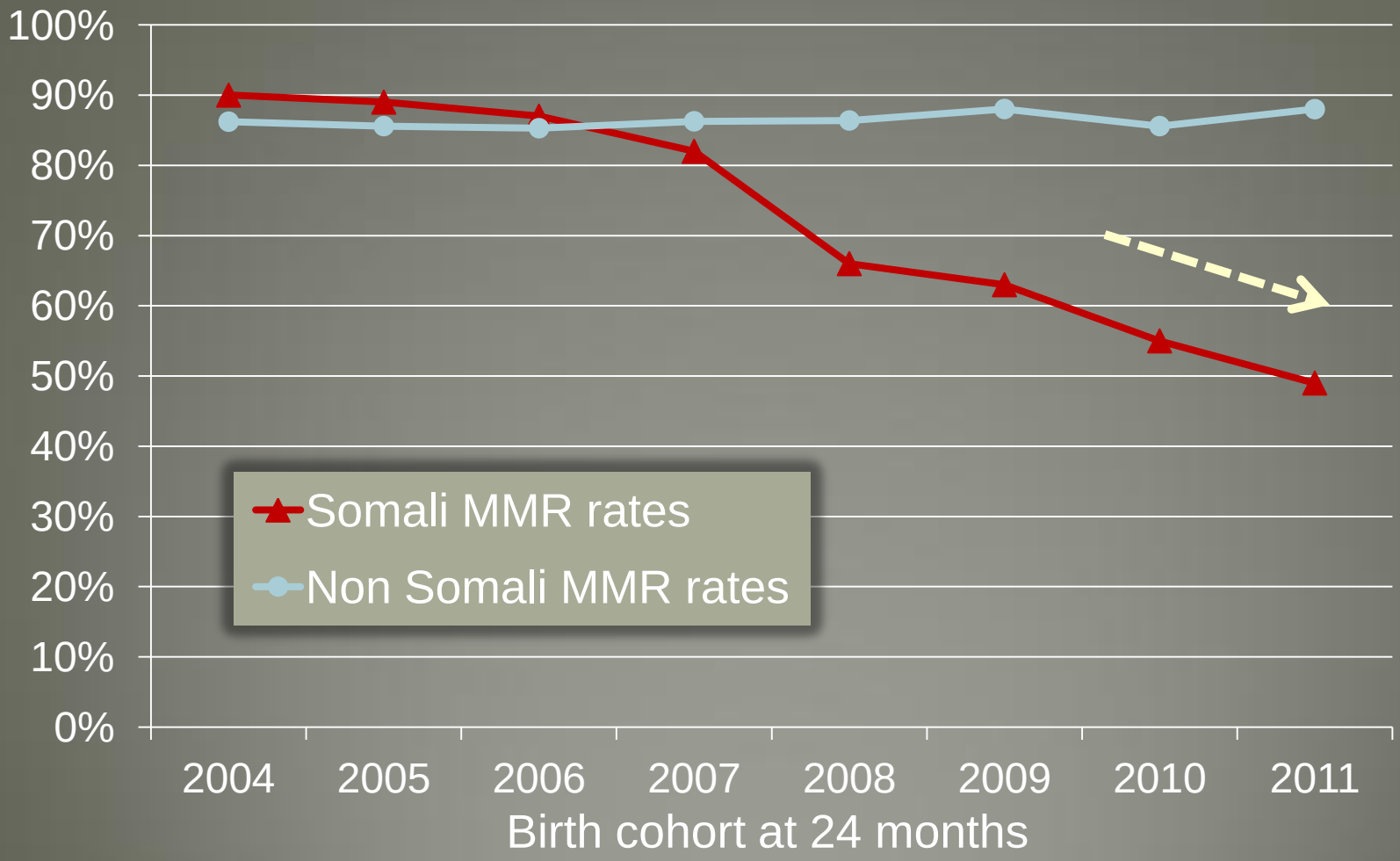
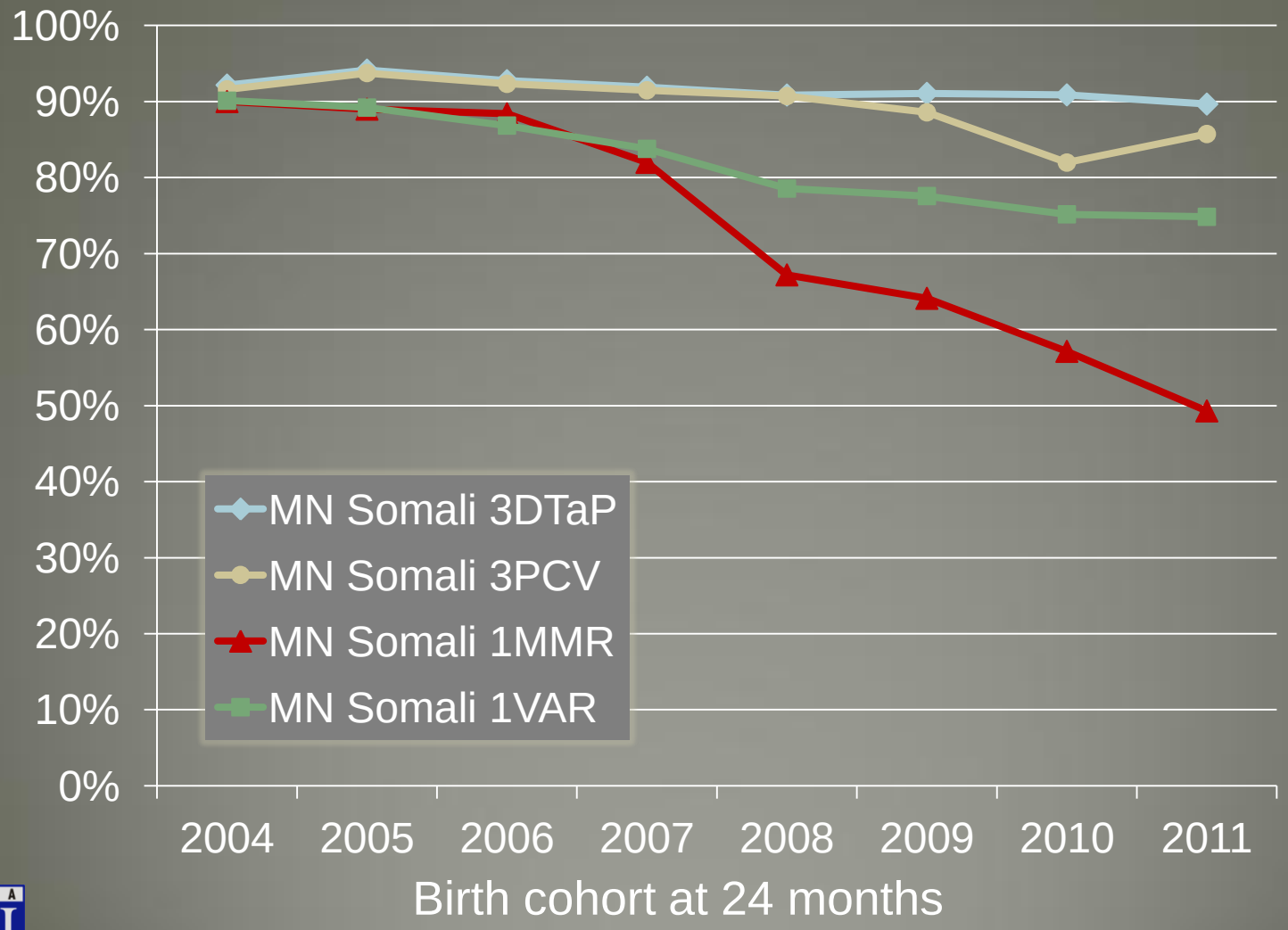
2013 REASSESSMENT:

COMPARISON OF MMR RATES AT 24 MONTHS IN CHILDREN OF SOMALI DESCENT VERSUS NON SOMALI, 2004-2011, MINNESOTA



Data derived from Minnesota Immunization Information Connection, April 2014

IMMUNIZATION RATES IN MINNESOTA CHILDREN OF SOMALI DESCENT AT AGE 24 MONTHS, 2004 - 2011



Data derived from Minnesota Immunization Information Connection, April 2014

TIME TO REGROUP

- What did we know?
  - Perspective of parents of children with autism
  - Parents were generally consenting to immunizations and specifically refusing MMR (12 month shots)
  - Autism fear was driving factor
  - Broad educational campaigns were not working

- Where were the gaps?
  - No “in” to the community
    - Was the source of misinformation only coming from parents of children with autism
    - How can we invite community members to trainings
  - What message would be effective
  - How to address fear of autism

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TIME TO REGROUP

- Consulted with CDC
- Developed cross-division team
  - Autism program
  - Immunizations
  - Communications Office
  - Refugee Health
- Hired Somali staff
  - RN – Children & Youth with Special Health Needs (CYSHN)
  - Outreach worker – Immunization Program

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GATHERING INFORMATION

- Parents: 20 interviewed
  - 12 of 20 (60%) reported MMR refusal, 12 of 12 stated autism fear as reason
  - Fear autism more than measles –they avoid a diagnosis when they suspect that something is wrong
  - Only 7 parents could say what autism is, however receptive to education
  - Most (85%) named healthcare provider as their trusted source of medical information
    - Yet family and community influences were significant contributors to their vaccine hesitancy

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GATHERING INFORMATION: CLINICIANS

- - Four clinics selected and interviewed
- - Interviewees included physicians, nurses, Somali outreach worker
- “MMR causes autism” belief is entrenched
- A deeply rooted oral tradition and the addition of a language barrier increases the creates difficulty in addressing misinformation
- Professional translators are used, and providers gave mixed responses regarding trust in the translators

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GATHERING INFORMATION

- MDH SOMALI STAFF
  - Women frequently attend national/international conference calls
  - Parents tell the provider they don't want "the vaccine that causes autism" - the provider says "okay"
  - Some translators tell parents not to get the MMR
  - Parents don't understand the milestone checklist
  - Parents are afraid to talk to their HCP if they think their child has autism

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APPROACHING MMR VACCINE HESITANCY: TAKE 2

- Address perceived risk[1] – autism
  - Focus trainings on child growth &development and autism first
- Change the script
  - From “we don’t know what causes autism” to “this is what we have learned about autism”
- Leverage social networks[2]
  - Use oral tradition to change the advice

[1]Mezaros, et al, J Clin Epidemio, 1996

[2]Brunson, Pediatrics, 2013

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WORK PLAN DEVELOPED

- Education and outreach
  - Oral approach – smaller groups
  - Three audiences
    - Parents
    - Influencers
    - Clinicians
- Provider/partner relationships
  - Formed a Somali Public Health Advisors group
  - Conducted an autism symposium in collaboration with the University of Minnesota

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WORK PLAN CONT.

- Outbreak control/mitigation
  - Increase community awareness of low rates through radio interviews, Somali newspapers, Somali TV
  - Internal/LPH planning for outbreak response –
  - Monitor MMR rates and provide ou
    where Somali children congregate:
    - Somali-owned day care centers
    - Somali-attended charter schools

http://www.youtube.com/watch?v=mcsdreBpODI&feature=youtu.be

THE IMPACT OF MINNEAPOLIS SOMALI ASD PREVALENCE STUDY ON THE THE SOMALI COMMUNITY

- The study confirmed a community suspicion that ASD is higher among the Somali kids, 1:32 compared to 1:68 nationally
  - Many thought it was a waste of time – they already knew this
  - Some felt vindicated – finally someone listened to them
- The study finding that 100% of Somali kids with ASD also had Intellectual Deficiency rang a huge alarm bell.
  - This community was horrified by this
  - Many, even those far from Minneapolis, or Minnesota, or outside the U.S. are wondering if their child is less intelligent

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COMMUNITY GENERALIZATIONS/QUESTIONS:

- What causes autism?
- Why our kids affected more than the others?
- The common response by the health professionals to Q # 1 is:
  - "The cause is not known" – this leaves the vaccine question easy prey

A BETTER RESPONSE COULD BE:

- Discuss what we do know about ASD - "up to now"
  - Millions of dollars in research; much has been learned over past 5 – 7 years
- There are many causes for multiple types of ASD
- Research is showing that Autism likely occurs before the baby is born or right at birth
- There are different exposures during pregnancy that make a child more likely to have an ASD, including
  - Environmental- extreme stress, certain types of pollution is being researched, nutrition
  - Biologic, such as viral illnesses
  - Genetic factors

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A BETTER RESPONSE COULD BE:

- Most scientists agree that genes are one of the risk factors that can make a person more likely to develop ASD.
- Hereditary factor account for up to 20% of autism diagnoses
  - Children who have a sibling with ASD are at a higher risk of also having ASD.
- ASD tends to occur more often in people who have certain genetic or chromosomal conditions

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APPLYING THIS CLINICALLY: TOOLS - FOR YOUR CONSIDERATION

- You and your time
  - Personalize the encounter – use the baby's name
    - Look at the parent, not the translator
    - Learn to say hello in Somali – "Iska waran"
    - Ask them something personal before "getting down to business"
  - Parents trust the provider for factual medical information
    - Provide advice with confidence – options are confusing
  - Predicting future consequences is not meaningful – the future belongs to Allah

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TOOLS - FOR YOUR CONSIDERATION

- Parents want to understand autism and the threat of it to their child
  - If a mother is refusing , invite the father to come discuss these issues at the next visit
- Parents need to understand the importance of developmental milestones
  - Show they what you are looking for
- Ask them if they understand what vaccines their baby is receiving

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TOOLS - FOR YOUR CONSIDERATION

- Your interpreters - are an extension of you
  - What is their understanding of developmental milestones, autism
  - Are interpreters hearing triple letter but telling you MMR?
  - Does the interpreter have personal concerns about MMR and autism?

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TOOLS - FOR YOUR CONSIDERATION

- Clinic staff – are they providing a pro-immunization environment
  - What is their understanding of MMR and autism?
  - Do staff have other vaccine-related concerns?
  - Adopt specific educational outreach activities
    - Reviewing the meaning of the milestone checklist
    - Discussing vaccines baby will receive
    - Instructing the parent about how to treat fever and sore limbs after vaccination

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CLINICAL APPLICATION: TOOLS

- Policies
  - Extra time for well child appointments that require an interpreter
  - Consistent clinician or consistent approach when seeing 0-24 month-old children

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