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Children Are Not Simply Small Adults

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A little history

American Academy of Pediatrics was founded
95 years ago

- ♥ Based on the new idea that children had unique health and development needs
- ♥ Changing the custom of treating children as “miniature adults”
- ♥ Established both pediatricians’ unique medical expertise and their commitment to speak on behalf of children’s welfare
- ♥ Began showing the value of many practices (routine health examinations, immunizations) which are now the standard of care

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Defining the pediatric population

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 **Age** 4

Practical and simple but not very meaningful


- ♥ Infancy



0-2 years


For more information, please see the Links tab

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 **Age**

Practical and simple but not very meaningful


- ♥ Infancy
- ♥ Childhood
 - Early, mid or late



2-12 years


For more information, please see the Links tab

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 **Age**

Practical and simple but not very meaningful

- ♥ Infancy
- ♥ Childhood
 - Early, mid or late
- ♥ Adolescence
 - Early and late
 - Unique challenges regarding consent to care and control of information



12-18 years

For more information, please see the Links tab

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Age

Practical and simple but not very meaningful

- ♥ Infancy
- ♥ Childhood
 - Early, mid or late
- ♥ Adolescence
 - Early and late
 - Unique challenges regarding consent to care and control of information
- ♥ Young adult



18-21 years

For more information, please see the Links tab



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Insurance and patient attribution 5

Insurance

Patient attribution

Hospital administration



Hardin AP, Hackell JM. *Pediatrics*. 2017;140(3)

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Insurance and patient attribution

- ♥ Various arbitrary age limits
- ♥ AAP Policy Statement
 - Transition to adult care depends on needs of the patient (especially CYSHCN) and shared decision making among family, patient and physician
- ♥ Lack of subspecialists trained in long-term care of children with chronic illness in adulthood

Hardin AP, Hackell JM. *Pediatrics*. 2017;140(3)

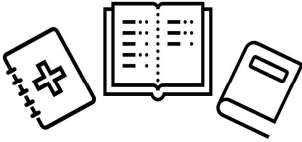
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Preventive care services 6

♥ Defined by AAP Bright Futures guidelines




For more information, please see the Links tab

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Preventive care services

♥ Defined by AAP Bright Futures guidelines

♥ Heavily weighted in early years



For more information, please see the Links tab

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Preventive care services

♥ Continues throughout pediatric age range

♥ Immunizations, screenings, developmental assessments, anticipatory guidance



For more information, please see the Links tab


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Illness care services 7

Acute, self-limited illnesses




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Illness care services

Acute, illnesses which become chronic after treatment

- ♥ Malignancies
- ♥ Congenital defects



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Illness care services

Chronic stable Chronic worsening




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Illness care services

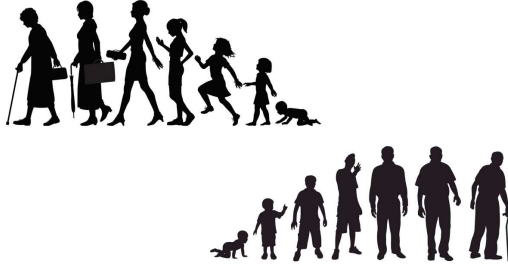
Mental health



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Illness care services

Illness across the lifespan



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Illness care services

Similarities and differences to management in adults




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Illness care services

Similarities and differences to management in adults



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Differences between children and adults, and approach to care

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Not just little adults...

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Psychological and developmental



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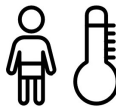
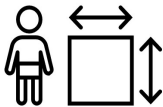
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Not just little adults...

Physical characteristics

Body surface area (BSA) differences

Temperature control and sensitivity

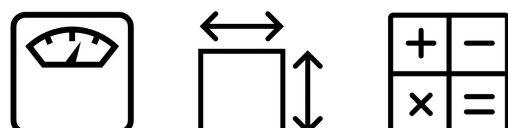


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Not just little adults...

Medication Dosing

By weight or BSA vs. fixed doses




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Not just little adults...

Pattern of catastrophic events

Trauma

Respiratory vs. cardiac




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Approach to the pediatric patient 10

Age



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Approach to the pediatric patient

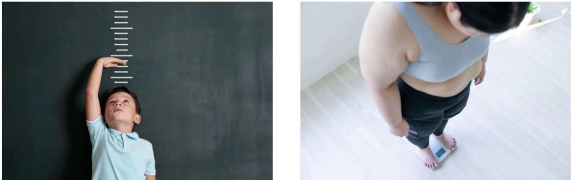
Transition



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Approach to the pediatric patient

Size/BSA-BMI



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Approach to the pediatric patient

Understanding and communication

Ability to participate in care



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Approach to the pediatric patient

Issues of consent and control

Minor-consented care

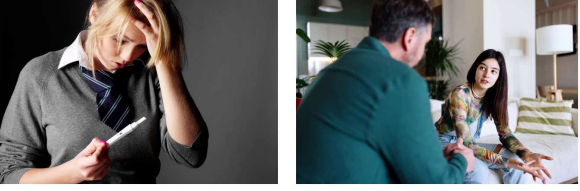


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Approach to the pediatric patient

Issues of consent and control

Confidentiality and control of healthcare information



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Real life issues in pediatric care 11

Preventive care – health and development
♥ Supervise and refer if out of the norm

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Real life issues in pediatric care

Preventive care – health and development
♥ Supervise and refer if out of the norm

Immunizations
♥ Critical for prevention of illness/disability/death

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Real life issues in pediatric care

Preventive care – health and development
♥ Supervise and refer if out of the norm

Immunizations
♥ Critical for prevention of illness/disability/death

Acute illness
♥ Self-limited – better despite what we do

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Real life issues in pediatric care

- Preventive care – health and development
 - ♥ Supervise and refer if out of the norm
- Immunizations
 - ♥ Critical for prevention of illness/disability/death
- Acute illness
 - ♥ Self-limited – better despite what we do
- Serious illness/trauma – prevention **and** care


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Real life issues in pediatric care

- Preventive care – health and development
 - ♥ Supervise and refer if out of the norm
- Immunizations
 - ♥ Critical for prevention of illness/disability/death
- Acute illness
 - ♥ Self-limited – better despite what we do
- Serious illness/trauma – prevention **and** care
- Chronic illness
 - ♥ Long-term care
 - ♥ Transition to providers with different focus

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Specific pediatric care issues

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Disease, trauma and substance use 13

Infectious disease

- ♥ Have not developed immunity to common illnesses
- ♥ Immunizations






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Disease, trauma and substance use

Trauma - the number one cause of pediatric death/disability

- ♥ Prevention is a learned skill
- ♥ Developmentally appropriate education
- ♥ Vehicles, firearms, inflicted injury
- ♥ Suicide




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Disease, trauma and substance use

Substance use

- ♥ "Invulnerability" of the adolescent
- ♥ Age-appropriate education



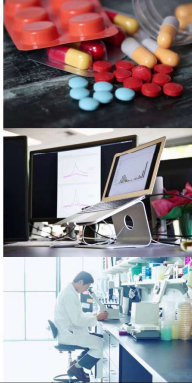
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Medication management 14

- ♥ Dosing - weight/BSA
- ♥ Lack of pediatric data/indication on huge number of medications
- ♥ Lack of clinical trials
 - Generally, not required for licensing
 - Consent issues
 - Benefit for individual vs. "society"
- ♥ Off-label use




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Off-label medication use 15

- ♥ Very common with lack of pediatric indication/approval
- ♥ Does not imply an improper, illegal, contraindicated, or investigational use
- ♥ Therapeutic decision making must always rely on the best available evidence
- ♥ The purpose of off-label use is to benefit the individual patient

For more information, please see the Links tab



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In summary...

- ♥ Children are much more than just smaller versions of adults
- ♥ Based on many factors



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 **In summary...**

- ♥ Children are much more than just smaller versions of adults
- ♥ Based on many factors
- ♥ Those caring for children should remain cognizant of these differences when making treatment decisions
- ♥ Children are the future—and deserve every effort we can give to enable them to reach the full potential of that future



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By leading world experts

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