A New Metric for the COVID19 Pandemic for Emergency Child Care

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April 2020

As emergency child care unfolds across the US we need to determine and monitor if it is safe and if it is being effective. In order to do this I would like to propose a new metric using adult child ratio, group size and square footage combined together as a way of gauging if children and adults are in a healthy and safe environment.

\[
\text{COVID19} = \sum \text{ACR} + \sum \text{GS} + \sum \text{SQFT}
\]

Where ACR = Adult Child Ratios, GS = Group Size, and SQFT = Square Feet per child.

ACR and GS represent the density of the occupied space while SQFT represents the total open space available to the children and adults. I would propose that the lower (fewer children and adults present) the ACR and GS with a higher SQFT will provide the greatest safeguards for children and adults. While the higher (more children & adults present) with a lower SQFT will provide the fewest safeguards for children and adults in emergency child care.

I would propose that for adult child ratio, Caring for Our Children standards for Ill Children be used with the group size being equal to the adult child ratio maximum and the square footage per child be 144 square feet per child for emergency child care. The 144 square feet per child is based upon the distancing guidelines of at least 6 feet separation. Children do not practice social distancing well so we need to build in as much open space as possible.

Data from the emergency child care sites could be collected over time to determine if this approach has any merit and actually works. It would be a simple data collection effort measuring the number of children and adults in a space and the square footage. By having fewer children and adults present and increasing the standard for the amount of space would hopefully decrease the chances of spreading COVID19 virus. Only testing out this theory will either prove or disprove its ability to help keep children and adults healthy and safe.