

!"###\$%&\$' %()*(+,-*+.\$/.01(*23.-4\$
5.-/\$6&,0/*0.\$-/, (7,&7-\$8%&\$,--.--*(9\$7:-61,9*,\$(\$1*91\$&*-\$;01*7&.(\$

6;<<2* 1 2%3"450* 1 2=;>;k?;* 1 39k)k3:*
1 7!>7@3*AB*!2?=-k=2);<*

C?kD;%<k)\$*"E*F ;<);%?G?)2%k"##@3("">*E*!" I I 4?k32)k"?*@3k;?3;<*2?=*J k<"%=;%<*

*

6(;*E">>"Kk?'*%;Dk;K*;52 I k?;=*)(;*#4L>k(<;=*;Dk=;?3;*E"*L;<)M##23)k3;*<2?=-2%=<k?%*%' 2%=<*
)"*)(* 2<<<I ;?)* "E* =\$<#(2' k2* k? 3(k=&=%;? 2)* (k'(M%k<:* E"* E; ;=&k? '* 2?=* <K2>>"Kk?' *
& I #2k% I ;?)<7*N*>k);%2)4%;* <;2%3(* "E* ;>3)"?k3*=2)2L2<;<*%;<4>;=*k?*;k'()<4=k;<*)(2)* I ;)*
&?3>4<k"? 3k);%k27* @)4=\$* =;<k' ?<k?3>4=;=*)(%; ;* <\$<); I 2)k3* %;Dk;K<

Based on the study design and weaknesses in their described methods of research, this review provides equivocal evidence to support the use of VFSS over other clinical swallowing assessments in children.

! , (\$ E. (\$ F (9.<)G%. ; \$./ \$, >H\$?@ABID\$ 3"?=43);=* 2*
>k);%2)4%;*%;Dk;K* Kk)(*)(; #4%#"<;<"E* .T* #%"Dk=k?'* 2?*"D;%Dk;K* "E*)(;* ="34 I ;?);=* #;=k2)%k3* E; ;=k?'* 2?="<K2>"Kk?'* #%"L>; I <0*

Q_ JN6T*2<2*)" ">*)"*=);% I &?;*)(; *;)&">" '\$"E*=\$<#(2' &2*
k? * 3 (k=>; ?* Kk)(* 3 ; % ; L%2>* #2<\$* Q ! BT7* 6 (; * _ JN6* k<* 2*
<K2>>"Kk? ' * 2<<; << I ; ?)* k?D">Dk? ' *) (; * 4< ; * "E* <4%E23 ; *
> ; 3)" = ; <0* 2* #% ; <<4% ; *)%2?<=43 ; %* 2?<= 2* I k3%"#(" ? ; * k? *
"% = ; %*) " * ' 2) (; %* <\$?3(" ? " 4<* % ; 3" % = k? ' <* "E* E ; ; = k? ' M
% ; <#k%2)"%\$#2)) ; % ? <7* 6(" 4' (*) (; * _ JN60* 3>k?k3k2?<32? *
'L)2k? *) (; *) k I k? ' * "E* "%2>* 2?<= # (2%\$? ' ; 2>* <2' ; <* "E*
<K2>>"Kk? ' * 2?<=3" I #2% ; *) (; I *) "% ; <#k%2)"%\$# ; <# " ? < ; <7
6 (; * _ JN6*K2<*2= I k?k< ; % ; = *) " * , - *)\$#k32>>\$* = ; D ; >"#k? ' *
#2%)k3k#2?)<*K(" * K ; % ; % ; 3%4k) ; = * E% " I * E2 I k>k ; <* "%*E%k ; ? = <*
"E*) (; * 24) (" % <7* _ 23(* #2%)k3k#2?) * % ; 3 ; kD ; = * 2##" 5k I 2) ; >\$*
, 7] * I A * "E*) (k? * E > 4k = * L\$ * <# " " ? * E " % * . - * 3" ? < ; 34) kD ; *) % k2 < 7*
S " % * ; 23(* #2%)k3k#2?) 0* ? " % I 2> * "% * 2L? " % I 2> * E4?3) k " ? * k? *
> 23(* <) 2' ; * "E* <K2>>"Kk? ' * K2<* = " 34 I ; ?) ; = * 2?<=3" I I " ? *
324< ; <* "E* k I #2k% I ; ?)* E "% * ; 23(* # (2< ; * K ; % ; * 3" ? <k = ; % ; = 7*
6 (; * _ JN6* = 2) 2* "E*) (; * , - *)\$#k32>>\$* = ; D ; >"#k? ' *
#2%)k3k#2?)<*K2< *) (; * 3" I #2% ; = *) "% ;) % " <# ; 3) kD ; * = 2) 2* "E*
. , X* = \$ <# (2' k3* 3 (k=>; ?* Kk) (* ! B* K (" * 4? = ; % K ; ?) (; *
<2 I ; * _ JN6* # " 3 ; = 4% ; % k? * . // Z7**
*

Y? * 3" I #2%k<" ? *) " *) (; * , - *)\$#k32>>\$* = ; D ; >"#k? ' * <4LP ; 3) <0*
Ek? = k? ' <* E% " I *) (; * _ JN6* % ; # " %) <* "E*) (; * . , X* = \$ <# (2' k3*
#2%)k3k#2?)<* Kk) (* ! B* = ; I " ? <) % 2) ; = * . T* 2? * k I #2k% ; = *
2?)k3k#2)"%\$#(2< ; * k? * ad [* "E*) (; * 3(k=>; ?U* , T%k?3" I #> ;) ; *

*

```

#.&.δ =&-<,(H$
?@ABRD*3"?=43);=*2*Kk)(k?M'% "4#*<4=$*)"
k?D;<)<'2);*(; 2Lk>k)$* "E*)(; #;=#k2)%k3* D;%<k"?* "E*)(;
_2)k?'*N<<;<<I ;?)^6"">M.-*QB_JYM_N6M.-T^)"*k=;?)kE$
2<#k%2)k"?* k?^3(k>=%;?* Kk)(* ?;4">"'k32>* k I#2k% I ;?)<7^
6K"* (4?=%;=*2?=#E&E)$ME"4%*3(k>=%;?* Kk)(* ?;4">"'k32>*
=k<"%=%;<?2?=#" <<kL>;* <K2>>"Kk?' * k I#2k% I ;?)<^ K;%
k?3>4=;=#k?^)(; <^4=$7^N';< "E*)(; #2%)k3k#2?)<^k2?';=*
L;K;?* .d^ I"?)(<^ 2?=# .d^ $;2%<7^ S">>"Kk?' * )(;
3" I#>;&"?*"E*)(;^B_JYM_N6M.-^L$*)(;#2%;?)<^"E";23(^
#2%)k3k#2?)0^2^)%2k?;=#)(; %2#k<^2?=#%2=k">"'k<^*#;%E"% I ;=*
2^RS@@"?";23(^#2%)k3k#2?)7^6(;*B;?;)%2)k"?MN<#k%2)k"?
@32>;* QBN@T^ K2<^ 4<;=* )" * =;)% I k?;* )(; * >;D;>* "E^
#;?;)%2)k"?2?=#2<#k%2)k"?0^2?=#;23(^ "E*)(; #2%)k3k#2?)<V^
<3";<^ K;%;* 3" I#2%;=#)"*(; k% B_JYM_N6M.-^ %2)k?' <7^
6(;*)(; %2#k<^<^ 3"?=43)k?' * )(; * RS@<^ K;%;* Lk?=#;=* )"
)(; * B_JYM_N6M.-^ <3"%;<7^ J;<3%k#)&D;* <2)k<^k3<^ K;%;*
32>34>2);=*Kk)(*)(; * Yf 1 M@B@0^ K(k; * k?)2M^ Q-7//T^ 2?=#
k?);%M%2);%* %;>k2Lk>k)$^ Q-7/aM

```

DeMatteo, C., Matovich, D., & Hjartarson, A. (2005). Comparison of clinical and videofluoroscopic evaluation of children with feeding and swallowing difficulties. *Developmental medicine and child neurology*, 47(3), 149-157.

Dodrill, P., & Gosa, M. M. (2015). Pediatric dysphagia: physiology, assessment, and management. *Annals of Nutrition and Metabolism*, 66(Suppl. 5), 24-31.

McNair, J., & Reilly, S. (2003). The pros and cons of videofluoroscopic assessment of swallowing in children. *Asia Pacific Journal of Speech, Language, and Hearing*, 8(2), 93-104.

Mirrett, P. L., Riski, J. E., Glascott, J., & Johnson, V. (1994). Videofluoroscopic assessment of dysphagia in children with severe spastic cerebral palsy. *Dysphagia*, 9(3), 174-179.

Selley, W. G., Parrott, L. C., Lethbridge, P. C., Flack, F. C., Ellis, R. E., Johnston, K. J., & Tripp, J. H. (2000). Non-invasive technique for assessment and management planning of oral pharyngeal dysphagia in children with cerebral palsy. *Developmental medicine and child neurology*, 42(9), 617-623.

Serel Arslan, S., Kılınç, H. E., Ya!aro"lu, Ö. F., Demir, N., & Karaduman, A. A. (2018). The pediatric version of the eating assessment tool-10 has discriminant ability to detect aspiration in children with neurological impairments. *Neurogastroenterology & Motility*, 30(11).

Van den Engel-Hoek, L., de Groot, I. J., de Swart, B. J., & Erasmus, C. E. (2015). Feeding and swallowing

disorders in pediatric neuromuscular diseases: An Overview. *Journal of neuromuscular diseases*, 2(4).

Wright, R. E. R., Wright, E. R., & Carson, C. A. (1996). Videofluoroscopic assessment in children with severe cerebral palsy presenting with dysphagia. *Pediatric radiology*, 26(10), 720-722.

Zammit-Maempel, I., Chapple, C. L., & Leslie, P. (2007). Radiation dose in videofluoroscopic swallow studies. *Dysphagia*, 22(1), 13-15.

* *
*
*
*
*
*
*
*
*
*
*
*