

New Care Models for an Aging Society: Community and Technology-Based Approaches

\$V SRSXODWLRQV DJH ZRUOGZLGH VRFLHWLHV IDFH D SURIRX
HIIHFWLYH FRPSDVVLRQDWH FDUH IRU D JURZLQJ QXPEHU RI
WKRVLH ZKR OLYH DORQH 5LVLQJ OLIH H[SHFWDQF\ DQG GHFOR
WUDGLWLRQDO IDPLO\ EDVHG FDUHJLYLQJ LV QR ORQJHU VXII
WHFKQRORJ\ GULYHQ VROXWLRQV DUH HPHUJLQJ WR ILOO WKH

&RPPXQLW\ EDVHG FDUH LV RQH NH\ VWUDWHJ\ /RFDO QHWZR
ZRUNHUV DQG KHDOWKFDUH SURYLGHUV FDQ FUHDWH D VDIHV
VRFLDO LQWHUDFWLRQ DQG DVVLVWDQFH ZLWK GDLO\ WDVNV
LQWHUJHQHUDWLRQDO OLYLQJ DUUDQJHPHQWV IRVWHU PXWXD
&RPPXQLW\ FHQWHUV RIIHULQJ KHDOWK VFUHHQLQJV ILWQHUV
KHOS VHQLRUV PDLQWDLQ SK\VLFDQ DQG PHQWDO ZHOO EHLQ

7HFKQRORJ\ DOVR SOD\V D WUDQVIRUPDWLYH UROH 6PDUW KP
PRYHPHQW GHWHFW IDOOV DQG UHPLQG VHQLRUV WR WDNH
FRQQHFHV WKHP WR GRFWRUV ZLWKRXW UHTXLULQJ WUDYHO
VLJQV LQ UHDO WLPH \$- SRZHUHG DQDO\WLFV FDQ DOHUW FD
EHIRUH WKH\ EHFRPH FULWLFDO

(FRQRPLFDOO\ WKHVH QHZ PRGHV FDQ UHGXFH SUHVXUH R
FDUH IDFLOLWLHV 7KH\ DOVR HPSRZHU ROGHU DGXOWV WR UH
LPSURYLQJ TXDOLW\ RI OLIH DQG GLJQLW\ +RZHYHU HQVXUL
DFFHVVLELOLW\ IRU ORZ LQFRPH JURXS UHPDLQV HVVHQWLD

*RYHUQPHQWV DQG SROLF\PDNHUV FDQ VWUHQJWKHQ WKHVH
UHJXODWLRQV DQG IXQGLQJ 7UDLQLQJ SURJUDPV IRU FDUHJL
EDVHG WHFKQRORJ\ DQG LQFOXVLYH XUEDQ SODQQLQJ DUH Y
HQYLURQPHQWV

%\ FRPELQLQJ FRPPXQLW\ VROLGDULW\ ZLWK WHFKQRORJLFDQ
WUDQVIRUP DJLQJ IURP D ORRPLQJ FULVLV LQWR DQ RSSRUWX
FRQQHFVHG DQG UHVLOLHQW FRPPXQLWLHV

, è ¢ ¾) Ý ... ž E b + ¾ ® ' ì Q Ê € Ý † ‡

随着全球人口老龄化加剧，如何为不断增加的老年群体，特别是独居老人提供有效且富有同情心的照护，成为一项重大挑战。寿命延长与出生率下降使传统的家庭照护模式难以为继。社区和科技驱动的创新方案正在崭露头角。

社区照护是重要途径之一。由志愿者、社会工作者和医疗人员组成的本地网络可以为老人提供定期探访、社交互动以及日常事务协助。共享住房和代际同住的形式能够增强互助并减少孤独。社区中心提供的健康筛查、健身课程和文化活动有助于保持身心健康。

科技在其中发挥着变革作用。智能家居系统可监测行动、检测跌倒并提醒服药。远程医疗让老人无需出行即可与医生交流，可穿戴设备则能实时记录生命体征。人工智能分析还可以在健康问题恶化前发出警示。

从经济角度看，这些新模式能减轻医院和长期护理机构的压力，并帮助老人更长久地独立生活，提高生活质量和尊严。然而，确保隐私、数据安全以及让低收入群体也能负担这些服务同样关键。

政府和决策者可通过完善法规与资金支持来强化这些努力。为照护人员提供培训、为家庭科技提供补贴、推动适老化城市规划，都是构建友好老龄社会的重要措施。

通过社区互助与技术创新的结合，社会可以将老龄化从迫近的危机转化为建设更关怀、更互联、更有韧性的社区的契机。

İ ğ 9 ^ Ü Ç Ü Ñ Ñ ý Ë Æ Õ Ñ Ä Ö x Û Ñ É Ò Ó Ç, È, ñ Ê Ó Ñ Ñ Ê Ë

K J S Q R P s I Æ K T _ c P _ K a [R Ä Å 5 : g P r a ? b M ħ l 7 g V M g P ħ A [Å Å , Å : [g
, Å : X Ä V j @ : j ÷ Q _ X Ä [X ħ M a / K g Q V : ħ g K : M a _ 5 y A p X M P s M ħ Å K T = D M g
[g N T N : N T X : K g ; Q _ W S a M ħ ħ . [, 1 T : j N D M : g Ä 5 [R b K _ S 9 T - L : M a M 5
[R _ L _ M 0 y Q T T \ g

[R b K _ L S T I K g Q V 5 : ÷ R b T H Å à ħ y S * [g @ : Å Å : : _ S a l _ a * 9 T ^ : Å Å @ : _
‡ _ M M S g D M Å I R b V [n Å Å : [* N a : 9 T K J M : : _ S R R K K A ħ a [Å 5 K g [: l _ \ ħ y [_ B _
- X _ [9 T N a s a ħ K [\ N [a [\ S j < P a 9 T I g : g V g N M : j \ y ' R ^ : T A g Z ? S _ R
9 T [_] * Å : < Å Å Å S ÷ ħ _ M T M K g [V g Å K : " P Å Å : a y _ T a 9 T R Å M Q V _ / P M _ 5 T ; M g
R ' R K K \ y I g

l : M a : Q Å X M : Q Å : M Q T \ a • \ ħ a j Å , R < Å Å Å S @ a M < T : M ħ Å T M g N l _
V < _ l g T K X _ 5 p e S V Å K V g \ ħ g y R g Å M P Å Å : j Å M S ò ħ 5 F ħ T @ [g A j r A a P ħ
N \ M S M g 0 N : T X ħ Å : [R S " ^ [* g : @ a M < T : M ħ Å : d Å R P Å Å @ [R S T \ I g
" ^ R [Å P K V @ X e ? g l _ X M l a K ħ y

- Å Ÿ ° Å l [g M g 5 R j F M _ V 9 T K a a = Ä : K g Q V [‡ _ @ N T K P _ X : R \ y T S P Å ħ
: j , Å : [R S l " l ð T \ M ħ R P M \ « Å ħ [[g A a X Å b @ X 9 T < T R P s l a \ \ ħ y _ *
< j N M a S l [ħ u T F g T D : R - S X R @ : g Ä 5 N , * ? ħ Å l : T M X f : \ ħ

[T : _ " 9 T M Å M Å _ [\ _ S J M S @ T Å C a S [\ _ S l _ R ħ g R [g M S _ @ : j R A P c l : T y [: l g
K g ; Q _ Å : l : g Ä 5 ÷ Å ħ H = T y c l : M a : Å g 5 [É ! F a 9 T , M b : c V Y R T a N S ħ K N R y

[R b K _ c Å D l _ 9 T l : M a c a M X _ ? Å R T V : j : [R _ O Å K T _ q j a 5 ÷ [å [* : D P ħ V : T
, Å : K g ; Q _ V X : T M ħ g R A P c l [R b : ħ _ S X P T M K W ħ ħ : l _ \ ħ y

1XH YRV PRGHORV GH FXLGDGR SDUD XQD VRFLH
FRPXQLGDG \ WHFQRORJ-D

.e?(pÙ(_(NnN(pμz?!(?eý?žz eý N{p?žeýpμ(ý?½p?Bíýp?!(ý?
ý?½p?p¾n(iz? i(N(pμ(?!(?ý!½eμz©?nýàzi(©H?Np e½N!z(©ž(íýpêý?
!(?ÙN!ý?à?eý?!N©nNp½ N{p?!(?eý©?μý©ý©?!(μíý!N Nzpýe?
àý?pz?©(ý?©½AN N(pμ(G?®½iB(p?ý©P?©zezn½pN!ý!?
à?(p?eý?μ(pzezBPýG?

?

.e? ½N!ý!z? zn½pNμýiNz?(©?½pý?(©μíýμ(BNý? eýÙ(G?!(©z
Nýe(©?à?žizA(©Nzpýe(©?!(?eý?©ýe½!ž½(!p?zAi((iýà½!
ý?(p?eý©?μýi(ý©?!NýiNý©G?hý?ÙNÙN(p!ý? znžýiμNAzn(pμýp?
(e?ýžzàz?n½μ½z?à?i(!½ (p?(e?ýN©eýnN(pμzG©ýe½!
H?ý μNÙN!ý!(©?AP©N ý©?à?(Ù(pμz©? ½eμ½iýe(©?ez©?
nýàzi(©G?

?

hý?μ(pzezBPý?!(©(nž(xý?½p?žýž(e?!(N©NÙzG?hz©?IzBnzÙ
NnN(pμz©H?!(μ(μýp? ýP!ý©?à?i(½(i!ýp?eý?μzný?!(zp(μý?
ý?ez©?ýp Nýpz©? zp?n)!N z©?©Np?p((©N!ý!?!(žziμpμNe(©?
i(BN©μíýp?©NBpz©?ÙNμýe(©?(p?μN(nžz?i(ýž(inNμ(?!(μ(μýi?
ýn Nz©?!(©ýe½!ýpμ(©?!(½(©(ýp?

?

.p?μ)inNpz©?(zp{nN z©H?(©μz©?nz!(ez©?ýeNÙNýp?eý?ž(inNμ
(p? ½(©eý©?ž(i©zpý©?nýàzi(©?ÙNÙýp?!(nýp(iý?n(_ziýp!
z?©½? ýeN!ý!?!(ÙN!ýG?®Np?(n ýiBzH?(©?A½p!©(B½iN!ý!
?!(ez©?!ýμz©?à?(e?ý (©z?žýiý? ½N(p(©?μN?

?

hz©?Bz N(ipz©?ž½(!p?Aziμýe((i?(©μý©?NpN NýμNÙý©?©½
©N!Nz©?žýiý?μ(pzezBPý?!zn)©μN ý?à?žeýp(©?½i ýpzn½pNμýiNý?
zp?NppzÙý N{p?μ(pze{BN ýH?eý©?©z N!(p?½pý?zžziμ½pN!ý!
žýiý? i(ýi? zn½pN!ý!(©?np©?©zeN?

?

1RX YHDX[PRG^a OHV GH VRLQV SRXU XQH VR
FRPPXQDXW «V HW WHFKQRORJLHV

JÅ¼4ÝÅÝîÝ ÅóÅð πÅÅπί£π ú !î£ Ýúðπ ú Åπ!ðπÁÆÖÝπό£êÅ! π
ÅÖÖÝ¼£¼Å πÅ πÛ!ό£Ýð π'π!ðπðúó» Åπ¼ úÝ £ð πÁÅπ Å úðð/
¼ÅîîÅ π !Ýπ4Ý4Åð π ÅîîÅ μπJÛ£îîúð×ÅóÅð πÁÅπîÛÅ Æ £ð¼Å
ð£ £îÝ Æπ ÅðÁÅð πîÅπóúÁÑîÅπÖ£óÝîÝ£îπ £ÁÝ ÝúððÅîπÝð !Ö
ðú4£ Ý¼Å πÖúðÁÆÅ π ! πί£π¼úóó!ð£! ÆπÅ πί£π Å¼Ûðúîú×Ý/
¼úó»îÅ π¼Åπό£ð !Åμπ

π

JÅ π úÝð π¼úóó!ð£! £Ý Å π¼úð Ý !Åð π!ðÅπ £ Æ×ÝÅπÅ Åð
îú¼£!:πÁÅπ»ÆðÆ4úîÅ ¶πÁÅπ £4£ÝîîÅ! π ú¼Ý£!:πÅ πÁÅπ úÖ
Å!4Åð π£ ! Å πÁÅ π4Ý Ý Å π Æ×!îÝÑ Å ¶π!ðπ ú! ÝÅðπ£!:π£¼
Å π!ðÅπ4ÝÅπ ú¼Ý£îÅπ Ý¼ÛÅμπJÛÛ£»Ý £ π £ £×ÆπÅ πί£π¼ú
Ýð Å ×ÆðÆ £ ÝúððÅîîÅπÖ£4ú Ý Åð πîÛÅð £ÝÁÅπÅ π ÆÁ!Ý Å
¼úóó!ð£! £Ý Å ¶π£4Å¼πîÅ! π»Ýî£ð πÁÅπ £ð Æ¶π£¼ Ý4Ý Æ π
Æ4ÆðÅóÅð π¼!î ! Åî ¶π¼úð Ý»!Åð π£!π»ÝÅðÇÈ Åπ Û; Ý !Å

π

J£π Å¼Ûðúîú×ÝÅπêú!Åπ£! Ýπ!ðπ üîÅπÁÆ Å óÝð£ð μπJÅ πό£Ý
! 4ÅÝîîÅð πîÅ πóú!4ÅóÅð ¶πÁÆ Å¼ Åð πîÅ π¼Û! Å πÅ π £ Å
óÆÁÝ¼£óÅð μπJ£π ÆîÆóÆÁÅ¼ÝðÅπóÅ πîÅ π £ ÝÅð πÅðπ Åî
'πÁÝ £ð¼Å¶π £ðÁÝ π !ÅπîÅ πú»êÅ π¼úððÅ¼ Æ πÅð Å×Ý Å
¼úð £ð Å π4Ý £îÅ μπJÛÝð ÅîîÝ×Åð¼Åπ£ ÝÖÝ¼ÝÅîîÅπ Å! π Ý
!» Ýî πÁÅπ £ð Æπ£4£ð π !ÛÝî πðÅπÁÅ4ÝÅððÅð π¼ Ý Ý !Å μπ

π

t! πîÅπ ί£ðπÆ¼úðúóÝ !Å¶π¼Å πóúÁÑîÅ π ÆÁ!Ý Åð πί£π Å Ý
îÅ πÆ £»îÝ ÅóÅð πÁÅπ úÝð πÁÅπîúð×!ÅπÁ! ÆÅμπ;î π Å óÅ
¬×ÆÅ πÁÅπ Å Å π£! úðúóÅ π î! πîúð× Åó ¶π£óÆîÝú £ð πîÅ!
îÅ! πÁÝ×ðÝ Æμπ;îπ Å Åπ ú! ÅÖúÝ πÝðÁÝ Åð £»îÅπÁÅπ×£ £ð
Æ¼! Ý ÆπÁÅ πÁúððÆÅ πÅ πîÛ£¼¼Å Ý»ÝîÝ Æπ ú! π ú! μπ

π

JÅ π ú!4úÝ π !»îÝ¼ π Å!4Åð π ÅðÖú ¼Å π¼Å πÅÖÖú π× ¬¼
Æ×îÅóÅð £ Ýúð π£Á£ ÆÅ ¶πÁÅ π£ÝÁÅ πÖÝð£ð¼ÝÑ Å π ú! πî
ÁúóÝ¼ÝîÅπÅ π!ðÅπ ί£ðÝÖÝ¼£ Ýúðπ! »£ÝðÅπÝð¼î! Ý4Åμπ#ðπ£
¼úóó!ð£! £Ý ÅπÅ πÝððú4£ Ýúðπ Å¼Ûðúîú×Ý !Å¶πîÅ π ú¼ÝÆ
£ð Öú óÅ πîÅπ4ÝÅÝîÝ ÅóÅð πÅðπ!ðÅπú ú !ðÝ ÆπÁÅπ»¬ Ý
î! π úîÝÁ£Ý Å πÅ π Æ ÝîÝÅð Å μπ

Ó o ë ð_?Ó àÂì.ð Óã ¯É »#á oµÉá É ¯ü ¿ Ó J
¿ b ý Â ? Â x ¿ o ?

ì ^Ñn Æ x² SÃ ex TÃ^•n ,ímyíèS ÷zS ìèT°èS á , ñ™èS•Tex ‡S^»W^ S'n ,î
ð ÿ ' ñ šèS Ô è WÃ§T† ñ™èS •Tex ñî ^ S'mî ‡^'è óT™óY èT°Ã T»•
T»ŽèSðW ò' ^ èS íèS k(^'î ©TÃ...óSŽí'èS °) mî .TÃn•SðY½ iú‡ŽÁí f
,ímyíèS ā» ^ím'n ŽŎmeíá ā, ð.S Žúµn½ ÄTØ ^'n iè ^ āÑmèS ā T°èS
yÃèS öšû ^™è T z è òŎmèS½

ñ » ±míèSñî ā•î kTŎeŸèñŎí ½ ›T›W y nS•m›S 'ímyíèS T»ŽèS^'n
»TímzSâ§Sn íµmòí kS•T • ì ^Ñn •¥èS T»ŽèS î^Ñî ñ »Tímz(Sñ āiT°èS
áT z*Sñ f ž T°mèS ÓŽmŸíèSŎ™èS kTe nŽn•'n Tíx½ î èS ëTúíèS Ä ^»T™
kT§ •Ä ë^Ñn mèS 'ímyíèS 'xS•íèS ^»T™n½ è'èS ñî āāÑn á‡TemíèS»^èS
™ÃòèS ^™yèS ñ ò™íèS •§ ā » ³TÃ•èS ā » ÄTÑr -T • ±ŸóW •§½

ÄŸŎn xŽ•èS xšèS á•TòíèS íµóW dŎS•n½ TÃ W TÃ• •î SÃ ‡ T z è òŎmèS d'ān
zT•èS ð ‡ RTe²*Tfñ™èS •Tex ^'Ç ñ » d±èS°fŽ ½ ‡*S á TòmfŽĚšn - Ñ™èS ñ »
lÒ èS Ä •èS kS•j íèS RS^n•)è áfTÑèS 'úz*S ,fTmnTíò f ŽÃ™èS èY
•¥èS kS• ¼mèSèY T»ŽèS î^Ñî ÷ eòn »Tò±§(SR TðšèSk) ā•mèñŎí ½ ā°ÃèS
Ž ±† €e¥n ðWāeŎ Ñ Ŏ`èS½

á ² T»ŽèSĐÄS•î kT ÄŸm™íèSŠ » °¼«èSÄÃ...nðWw%TíòèSŠúè ñŎí TÃ‡T¥mŎS
iúnT , ‡ z •'¹ Tí è)Ñm(S ā » á ²W •^Ŏ ñ™èS•Tex €òín Tíx½ ^'¹*S
kS%kT Äāè á § èS óTŎiY kTót eèSñîW § ¥...èSðTí- dy Ŏè%,î ½ iúmîŠ x
‡ ^•íèS á†^èS½

è'òíèS kT òÑmāā ín e›Tòí kT° ŽŸn á)† ñî ‡ úyèS öšû i»‡ kTî Ŏ•āè ñŎí
•TŎmf(S 'ímyíèS ñîT«mèS ñ f ,íyèS ðY½ T»ŽèS î^Ñîè d •^n xíS•f
T»• TÃf S•n Žq×WkT°ímyî RTòèè §ŽÄ èY î•W ñî ‡ ... ŸèSá • z è òŎmèS½